School phobia: In search of a syndrome

Thesis

SCHOOL PHOBIA: IN SEARCH OF A SYNDROME

An examination of the concept of School Phobia and a search for groups displaying school phobic type reactions in mainstream schools.

by

William John Thomas Conn

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ABSTRACT

This study is concerned with childrens' anxiety regarding school attendance of which school phobia is the most extreme form.

A literature cull identified features believed to typify the school phobics pattern of anxiety and these were included in a battery of instruments administered to a random sample of 225 boys and 261 girls between the ages of 11 and 16 years. This battery was also administered to a sample of 30 clinically defined school phobic boys and 19 school phobic girls.

Four groups, validated by a series of Discriminant Function Analyses, emerged in this study. These groups are taken to represent a continuum of anxiety relating to school attendance from severe to anxiety free. Evidence is adduced for the need to evaluate boys and girls data separately

The groups were found to differ for both boys and girls in terms of age and ability but not social class or the number of other fears experienced though slight differences in the nature of fears emerged. Overall the girls groups more commonly reported fears.

Difficulties with friendships emerged as highly significant. However there were sex differences in the importance of the age and sex of friends variables and in whether the friends come from the childs own school.

Differences also emerged on a specially created Vulnerability in School measure but not on a General Satisfaction with School scale.

Sociometric data reliably discriminates among the groups for both boys and girls though generally did not appear to have an impact on favoured spare time activity.

The school avoidance strategy of pretending to be sick did not prove to be significant though recourse to truancy did - especially among the boys.

Additionally, significantly more sleep and nighttime problems are revealed among the more anxious groups for both boys and girls.

The significance of these and associated other findings are analysed and a tentative model of the anxious childs' situation in terms of theories of Stress and Coping nominated as furnishing a possible synthesis.

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"Why do I yield to that suggestion
Whose horrid image doth unfix my hair
And make my seated heart knock at my ribs
Against the use of nature? Present fears
Are less than horrible imaginings"

MacBeth Act 1 Scene 4

The present study is concerned with anxiety in regard to attending school of which 'school phobia' is the most extreme manifestation.

Considerable research interest has been attracted to the the predicament of the school phobic child and his or her family particularly since the 1940's though very vivid descriptions of the problem were available many years before then. Papers on school phobia appear in a ratio of 25:1 over papers on other childhood phobias (Miller et al 1974). However, despite this effort, the condition remains one of the most painful, distressing and frightening psychological problems faced by school children. It can be devastating and overwhelming to their families and lead to considerable frustration and exasperation among professional workers such as teachers, psychologists, welfare officers, school doctors, clinics etc.

The present writer became aware of the impact and complexity of the school phobics reaction in his employment as an Educational Psychologist working in a Local Authority setting. Practical experience led to the strong intuition that those pupils who conform to the clinical diagnostic criteria are not so sharply distinguished from other non-attenders or other anxious pupils who none the less manage to attend school as is sometimes suggested. The very common research strategy of using 'normal attenders' and 'truants' as either control or comparison groups came to seem potentially a distorting rather than necessarily a clarifying influence.

Despite a lengthy literature search a number of important issues appeared unresolved. How similar are school phobics to other pupils who are anxious or frightened about attending school but none the less sustain an acceptable attendance level? Are these children with attendance anxieties part of one group or are there important subgroups? What is the numerical size of the problem? Are these anxious pupils more fearful in general or is the anxiety specific to school? To what extend does the fear of school impinge on or relate to difficulties with peers as opposed to anxieties regarding teachers or school work? Does this anxiety affect other aspects of the pupils lives such as spare time activities or sleep patterns?

It was in an attempt to throw some light on these issues that the present study was undertaken.

Chapter 1 Historical Background

Though the prime focus of the present study is concerned with a small, specialized, sub-group of school non-attenders it is likely to be helpful if the general historical background to compulsory schooling is sketched in and an overview provided of the wider framework of the school attendance literature.

Education first became compulsory in Britain in 1870 with the passage of the Foster Education Act. The late 18th and 19th century view of education as a service for voluntary (frequently charitable) endeavour had begun to give way. Plans for the education of the working classes attracted a wide spectrum of views ranging from the unlikelihood of its succeeding to being regarded as overtly dangerous. In 1880 Education was made more generally compulsory and in 1891 Elementary Education was virtually free. However it was not until 1918 that half time schooling was abolished and all Elementary Education made entirely free (Tyerman 1968).

Section 36 of the 1944 Education Act made it a requirement for the parents of every child to ensure attendance in full time education suitable to age, aptitude and ability by regular attendance at school or otherwise.

By this stage the country had moved a very long way from what W.E. Foster (the father of the 1870 Act) had called the 'startling principle' of compulsory education in his introduction to the Bill (Fogelman and Richardson 1975).

While much attention has focussed on the problems of truancy in the sense of absence from school without the parents knowledge or consent, the evidence suggests that even before compulsory education there were difficulties regarding attendance. In relation to the period circa 1850 it is argued that "enthusiasm for education varied with the standards of the schools - good schools quickly gaining the support of parents" (Pallister 1969) and in 1897 Kline was writing learnedly and comprehensively on the subject pointing out that "during the past two years some systematic study had been devoted to truancy chiefly along statistical, sociological and anthropometrical lines".

The historical trend toward full time compulsory education has not been without its critics and there are sincere members of the 'deschooling' movement who argue that the whole structural apparatus and impact of school experience represents an insidious form of corruption of the minds of the young.

Perhaps the name most associated with this view in Britain is that of Ivan Illich who argues with great subtlety and persuasiveness for the social and personal disadvantages of formal schooling.

He contends that pupils are schooled to 'confuse teaching with learning, grade advancement with education, a diploma with competence, and fluency with the ability to say something new' (Illich 1971).

Whether such a radical general account of school both as a contaminated and a contaminating system has many totally committed adherents is not the major issue here. For present purposes the 'deschoolers' represent one end of a continuum the other end of which is Principle 7 of the United Nations Declaration of the Rights of the Child:

> "The child is entitled to receive education, which shall be free and compulsory, at least in the elementary stages. He shall be given an education which will promote his general culture and enable him on a basis of equal opportunity to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society. The best interests of the child shall be the guiding principle of those responsible for his education and guidance; that responsibility lies in the first place wih his parents. The child shall have an opportunity for play and recreation, which should be directed to the same general purposes as education; society and the public authorities shall endeavour to promote the enjoyment of this right".

Though major ideological battlelines can be drawn up on either side of the issue of compulsory schooling the present reality in Britain is of a legal requirement to attend school between the ages of 5 and 16 years. Inevitably in any arrangement that requires such a commitment from families and occupies such a hefty proportion of the child's life problems are likely to emerge.

However, despite the variety of demands on the child's social, emotional and cognitive resources during this period and despite the fact that these demands occur during a period of significant developmental change in the child's life, the majority of children (and families) accept, cope with and appear to enjoy the situation.

Although there is disagreement on many points of detail the consensus in the relevant literature suggests that the overall absence rate from school in Britain is about 10% (Fogelman and Richardson 1974, Hansard 1974). However such a global statement masks some established regional variations.

Special problems relating to attendance have been reported for Scotland (I.S.D.T. 1974) and Wales (Carroll 1977). Furthermore there are reported differences in terms of age, sex, and social class of pupil.

Age differences are reported in terms of a bimodal distribution for absence peaks with the infant age range (Shepherd et al 1971) and later secondary school years (Tyerman 1968, Fogelman et al 1980) manifesting a higher incidence.

Differences by sex of pupil are reported in the direction of more girls being absent when the reasons for absence are combined but more boys being regarded as truanting (Fogelman et al 1980).

Social Class variations have commonly been found (Galloway 1976, Reid 1980) with a general trend for absence rates to increase as one moves down the Registrar General's classification by occupation (Fogelman et al op cit).

More serious difficulties emerge when one seeks to look at the distinction between justified and unjustified absence - the normal definition of justified absence being that of the 1944 Education Act which regards absence as justified by medically diagnosed illness, days of religious observance or other good notified cause.

It has been noted that 87% of absence of children up to the age of 7 years is due to medical causes as is 80% of absences for both boys and girls between 8 and 11 years (Tyerman 1968). After age 12 a sex difference begins to emerge but it is very slight with 72% of boys' absence and 70% of girls' absence believed to be for medical reasons.

Shepherd et al (1971) reported that the average loss of schooling between 5 and 6 years is twice that between 11 and 12 years 'due possibly to exposure to infection'.

A substantial problem in obtaining accurate figures relates to some important weaknesses in the school attendance register as the major source of apparently objective evidence. Firstly the register does not in itself distinguish between justified and unjustified absence; secondly it does not help with the problem of post-registration truancy.

Furthermore the common research strategy of measuring school attendance in terms of the number of half days present and producing an overall figure of 90% could mask the fact that over half the children are truanting (Williams 1974). A similar point has been made by Carroll who comments that a 90% attendance rated could mean that 90% of pupils are there all the time and 10% are never there at all or that all pupils are there only 90% of the time (Carroll 1977).

A Department of Education and Science survey in January 1974 looked at the school attendance of all children age 12 years and over on roll in schools in England and Wales. It found an absence rate of just under 10% and schools knew of no adequate cause for this in 22.7% of cases. These unjustified absences accounted for 2.2% of the total roll. Roughly equal number of boys and girls were absent with the highest rates in the final year (D.E.S. 1974).

Despite the fact that this was a well organized, national survey it has been heavily criticized not least because it was conducted in the first year of the raising of the school leaving age. Its findings are however in something of a contrast with the outcome of that conducted by the National Association of Chief Education Welfare Officers. They report that, though finding an overall attendance rate of 92.7% this obscured the fact that 22% had been absent at some stage during the week and that between 3.5% and 7% were absent without good cause (N.A.C.E.W.O 1974).

Where sources of evidence other than the school attendance register have been used, a radically different picture tends to emerge. The National Child Development Study based on a detailed follow up of all children born in one week in March 1958, used school attendance among its myriad measures. This they sampled by parent, teacher and child self-reporting.

At age 16 years 52% of pupils answered 'yes' in response to the question, 'Have you stayed away from school at all this year when you should have been there'. Teacher reports for the same pupils indicated that they felt that some 12% were 'somewhat' prone to truancy and 8% 'certainly' so. Parental report indicates that 88% parents said their child 'never' played truant, 10% said 'occasionally' and 3% said ' at least once a week' (Fogelman et al 1980). Given its size and structure the N.C.D.S figures require to be taken seriously.

It seems clear from the above overview that, while the majority of children make and maintain a good school attendance, problems do exist for a sizeable minority.

In the present study the focus is on that sub-group of children with problems of attendance commonly referred to as school phobic. The pattern of this work will be one of sketching in an outline of the various terms used to label this group and the associated definitions and incidence figures. This is followed by comment on the major aetiological theories which involves looking at the published research on the school phobic's family and school context, then at his or her individual characteristics.

Following this review the production and validation of a measuring instrument to help identify school phobia and related types of anxiety in school-attending pupils is reported. The manner and nature of how the groups identified differ from clinically defined school phobics is explored and finally an attempt is made to generate a model to account for the school phobics' reactions and difficulties.

Chapter 2 Definitions and terms used

Absence from school caused by or strongly associated with marked anxiety has a long history. Indeed writing as early as the 1890's half of the cases of what were then termed 'Nostalgia' or 'love of home' occurred on entering school, taking up a new position or moving to a new neighbourhood (Kline 1898).

A careful reading of the available literature indicates that a very large number of designations have been employed. It has been possible to identify 43 different terms used (outside the field of truancy and its own array of labels). The terms used range from those heavy with aetiological implication eg separation anxiety through those that are richly descriptive eg 'the going to school sickness' to the pseudo scientific and unhelpfully obscure 'didaskaleinophobia'.

In order to impose some structure on what might otherwise be a laborious listing of terms they have been grouped under five umbrella headings: (a) related to separation from home (b) related to features of the school (c) related to attitude (d) related to psychosomatic/medical aspects and (e) related to behavioural features. Inevitably some of the terms might have been placed under other headings and to some extent the choice of heading is arbitrary. None the less it seems more likely to be enlightening to have some form of grouping.

(a) Terms highlighting separation from home

'Separation Anxiety' is at once a label for the condition and a whole theoretical model. A large number of writers have used the term but it was given its clearest statement and most formal use in the work of Estes and co workers and of Eisenberg (Estes et al 1956, Eisenberg 1958).

The concept of separation anxiety is used as an explanatory device by a variety of writers who actually employ different terms for the condition eg 'School refusal with anxiety' (Smith 1970), 'The child who is afraid to go to school' (Hanvik 1961), 'First day fear' (Church 1966).

'Separation Anxiety in the school situation' is a phrase sometimes used to accommodate what is thought to be a sub-group of children whose school attendance difficulties might be related to home rather than school features (Eysenck and Rachman 1965).

The phrases ''Stay at Home Neurosis', 'Mother Following Syndrome', and 'Psychoneurotic Truancy' are all early terms coined by Partridge to label a sub-group he identified in a more general study of truancy. These are highly expressive terms and massively imply a theoretical formulation which was later to become for a period the predominant view (Partridge 1939).

Closely linked conceptually to Partridge's style of thinking are the terms 'Motherphiles' (Davidson 1960) and Waller and Eisenberg's (1980) 'Home Bound Absence'.

Three other terms which, though not so immediately suggestive of separation from home as an important dimension but are clearly intended to be so from the text of the papers are, 'A case of neurosis in a child' (Jung 1911), Anxiety neurosis - school phobia' (Talbot 1957), and 'Acute neurotic breakdown with refusal to go to school' (Warren 1948). In the same paper Warren also used the term 'Special Truant' to cover the same area.

(b) Terms highlighting features of the school

'School Phobia' is a term which when taken literally is strongly suggestive of school specific features and indeed in one of its earliest appearances in the literature was used in this sense (Burt 1920). However in the United States Johnson et al (1941) to whom the coining of the term is often wrongly attributed, use the term but their preferred explanatory model is predicated on the relationship between mother and child. In that sense the term 'school phobia' could as well have been placed on the 'separation from home' listing.

The terms 'School Fearfulness' (Rhine and Spencer 1975), 'School Anxiety' (Morgan 1959, Morris et al 1976), and 'School Aversion' (Eaton and Houghton 1974), are used to describe a reaction to the school or something in it.

Majumbar (1975) uses the term 'pedagophobia' to account for a generalized aversion to the learning situation which begins with a phobic reaction to a particular subject in which the pupil had previously demonstrated good ability. Whitehead (1980) in a list of technical names for phobias includes 'Scholinophobia' and 'Didaskaleinophobia' for school phobia.

(c) Terms highlighting attitudes to school

The following list relates to school specific attitudes. It also has its arbitrary elements. It includes terms such as 'School Refusal' (Cooper 1966) who describes it as a 'comprehensive term designed to include all children persistently refusing for whatever reasons to attend school' and as such is very wide in its use. In a sense it is similar to the term 'School Resistance' (Jackson 1964) whose interpretative framework is largely psychoanalytical and leads on to the more general 'the child who dislikes going to school' (Mitchell and Shepherd 1967).

Leventhal and Sills (1964) look at the question in terms of the pupil over-estimating his or her abilities and facing a severe reality test in school. Though by and large using the term 'school phobia' they also talk of 'school reluctance' in this respect. The same basic model is incorporated in the phrase 'Symbolic and Actual Flight from School' (Hitchcock 1956).

Other writers talk of 'School Avoidance' (Cooper 1973), and Raven (1979) discusses some of the same attitudinal difficulties under the name 'School Rejection' - a term also favoured by Lasser et al (1973) who use it interchangeably with school phobia.

Related to the notion of children who dislike school but who none the less manage to make a reasonable attendance several other terms have appeared eg 'Emotional Absenteeism' (Frick 1964) which he sees as a 'less dramatic form of school phobia', 'The Invisible Child' and 'Children Spiritually Absent' - both terms coined by Stringer (1973).

Kahn and Nursten (1964) - with the addition of Carroll for the third edition in 1981 - use the latter part of the Shakespearian quote 'creeping like a school boy unwillingly to school' as the title for their collaborative work on the problems of school non-attendance. This quote implicitly dates attitudes of reluctance to attend school from at least the early 17th century.

Finally in this section, Marklund (1972) talks of 'School Fatigued Pupils' whom he describes as 'generally anxious and highly sensitive persons who need to escape from reality'.

(d) Terms highlighting psychosomatic/medical aspects

Once again this categorization must be regarded as rather arbitrary at one level but represents, none the less, an important element in some of the published research and is a source of some of the more oblique terms used.

Berlin (1965) discusses a group which he refers to as 'Children who won't go to school' as 'emotionally disturbed, manifesting their illness through psychosomatic symptoms'; while Waller and Eisenberg (1980) talk of 'Weekday morning sickness' of which they say it is 'perhaps the most common disguise of school phobia familiar to every paediatric practice'. Additionally they use the colourful sounding expression, 'Masquerade Syndrome' to refer to the fact that childrens medical problems can 'masquerade problems in leaving home to go to school'.

The idea of disguise highlighted by Waller and Eisenberg is not new to the field. Meadow (1977) refers to some cases of school phobia as the 'Munchausen Syndrome by proxy' (the Munchausen Syndrome being a factitious disease caused by either the parent or the child to obtain or maintain some secondary gain such as attention or staying off school). Others have talked of the 'Paediatric equivalent of the Munchausen Syndrome' (Sneed and Bell (1976).

Still in the basically medical domain school phobia has been included as one of the symptoms of the 'Vulnerable Child Syndrome' (Green and Solnit 1964). These children had been expected to die and it is reasoned that, as a consequence, the parents have been more solicitous than is helpful. Similarly but without the special justification of the children having been at risk of dying Sangster (1971) talks about the 'Going to School Sickness' and says of the mothers that they are usually overprotective and possessive of their children.

(e) Terms highlighting behavioural aspects

As one would perhaps predict from the likely approach of more behaviourally orientated workers they have produced fewer new names or labels but have contributed much more detailed descriptions of what actually is involved.

However three terms have been added to the literature from this perspective. Brown (1963) uses the expression 'The stay at home habit', Waller and Eisenberg (1980) more explicitly talk of 'Absent from school behaviour' and perhaps the most behavioural definition thus far proposed 'Zero to low probability of school attendance' (Ayllon et al 1970). They make the explicit point that school phobia 'can be defined behaviourally as an observable event of low frequency or probability of occurrence'.

The presentation of the above profusion of names, labels and terms relating to school phobia in itself epitomizes the confusions and contradictions which seem to proliferate in the published literature leading one writer to assert in the title of an article in the Times Educational Supplement, 'I am absent, you play truant, he/she is a phobic' (Lang 1975) and more pointedly occasioning Shapiro and Jegede to entitle the paper 'School Phobia: a babel of tongues' (Shapiro and Jegede (1973).

Within this array of terms and theories one would expect a rich variety of definitions. Interestingly, despite (or perhaps because of) the range of labels, very few clear definitions have emerged - lengthy case histories being at times substituted - more one feels to give the flavour of the problem rather than venture a formal definition which some workers might see as potentially too restrictive.

Many writers working from a psychoanalytic perspective conceptualize school phobia as a condition generated by anxiety in regard to separating from the mother (Johnson et al 1941, Estes et al 1956, Gittelman-Klein and Klein 1980).

Within this framework it has been argued that this is not a true phobia which would be characterized by fear in the presence of some object or situation but a pseudophobia being triggered by the absence or loss of an attachment figure or secure base (Bowlby 1973).

While the use of a single expression (whether loaded in one theoretical direction or another) may be helpful to the more general process of communication a number of workers have sought to highlight that school phobia is not a unitary syndrome but may be an aspect of a wider or more complex disorder (Hersov 1960, Weiss and Cain 1964, Yule et al 1980).

The possibility that the actual phobic reaction may occur at a point along a continuum of severity of reaction has been raised by some writers (Glazer 1959, Sarason et al 1960). The definitional and conceptual problems of finding valid ways of determining an appropriate cut-off point are considerable. Inter-rater reliability in such work can be unhelpfully low.

In the present study the definition proposed by Berg and his colleagues (Berg et al 1969) will be used. This is a clear, and reasonably operationalized definition which has the additional advantage of having been used extensively in defining the phobic groups in much other recent British research. This is important since much clinically orientated research can readily be rendered difficult to interpret or to compare with other work unless the definitions are not only clear and accessible but shared to a reasonable degree by other workers in the same general field.

There are four components to the definition proposed by Berg and colleagues: (a) Severe difficulty in attending school amounting to prolonged absence (b) Severe emotional upset - shown by symptoms such as excessive fearfulness, undue tempers, misery or complaints of feeling ill without obvious organic cause on being faced with the prospect of going to school (c) Staying at home with the knowledge of parents when they should be at school at some stage during the course of the disorder and (d) absence of significant anti-social disorders such as stealing, lying, wandering, destructiveness and sexual misbehaviour.

One should note however that these criteria, while being less open to misinterpretation may in themselves go too far in their implication (embedded in the final requirement) that anxiety regarding school cannot be associated with anti-social behaviour. There seems neither pragmatic nor theoretical justification for arguing that a school phobic child cannot also steal or be destructive etc. This fact is acknowledged to some degree in later work which goes some of the way towards an acceptance of mixed types (Berg et al 1985).

The question of definition logically precedes any discussion of incidence. It is proposed here to give considerable space to this issue of incidence as it has an important bearing not only on the motivation for but practical aspects of the present study.

Incidence

The wide ranging possibility of inclusion underlined by the previous section highlights the difficulty in determining good incidence figures since determination of incidence requires exactitude, or at any rate, agreement on major definitional features.

Broadly there appear to be three main reasons why the apparent ease of using the term school phobia has in practice generated difficulties.

(1) The lack of clearly agreed definition is inevitably important. Not only is there no generally agreed definition but there are profound conflicts regarding aetiology and mode of expression of difficulties.

(2) There is no central collection of statistics. Neither the D.E.S. nationally nor L.E.A.'s individually routinely collect data on the numbers of children and young people refusing school though attendance data in general are systematically collected. Clearly this is in part related to (1) above and in part to the fact that neither Child Guidance Clinics nor the Schools Psychological Services (which are the two main agencies likely to deal with the anxiety component in relation to attendance difficulties) have a systematic data coding or retrieval system. It would probably not be unfair to argue that many do not have an agreed or effective means of dealing with data by category of problem rather than by individual child.

One worker circulated School Psychological Services and Child Guidance Clinics in order to collect figures for the period 1956 to 1960. Out of 178 centres approached 101 replied but only 38 could give information and only 1 expressed complete confidence in the figures they provided (Cooper 1966). She is not alone in commenting on problems relating to the quality of recording of information (Hitchcock 1956, Eisenberg 1958).

(3) Referral bias too is important. It seems likely that various agencies with a role including direct access to child-specific psychological problems make differential use of support services or seek to cope without the help of these agencies (Ryle 1963, Shepherd et al 1971 - the latter demonstrating that the severity of problem is not the crucial factor in referral).

Many workers regard school phobia as on the increase. A common research strategy has been to look at school phobia as a percentage of total clinic referrals. However very divergent results have emerged from this approach. These range from 1% (Chazan 1962), 2% to 3% (Model and Shepherd 1958, Morgan 1959), 5% (Hersov 1960), 8% Kahn and Nursten 1962, Baker and Wills 1978) to 13% (Barnes 1963). One study from the United States put the figure at 20% though closer reading reveals that there were special circumstances involved (Loof and Smith 1969).

There does however seem to be a general feeling that the problem is on the increase. Cooper (1966) again using clinic referral rates as a guide noted a rise from 4.1% in 1956 to 6.2% in 1960. Similarly, in the United States it has been noted that between 1948 and 1956 school phobia rose from 4:1000 to 17:1000 and currently (1958) stands at 30:1000 (Eisenberg 1958).

Talking in terms of a 'rough' estimate Tyerman (1968) noted that 1 in 1000 of the child population is school phobic. He bases this estimate on returns from various Child Guidance Clinics - his figures being unusually low in comparison with other research. One of the most respected and commonly quoted figures in the literature is 17:1000 (Kennedy 1965). His figure is more in line with British findings and is congruent with the views of one of the most prolific British investigators of this problem Ian Berg who argues that the period prevalence of school phobia in early adolescence is about 1% (Berg 1980).

Berg's comment regarding the period prevalence in early adolescence serves to remind us that age is an important variable (the relevant literature being reviewed more fully in a later section). Inevitably the question arises as to whether it is possible to draw together and make sense of the various and sometimes conflicting figures from the research reports. Three reasons have been put forward for the differential referral rates (Tyerman 1968).

(a) Referral can depend on the relations between clinic team and the referrers eg teachers, education welfare officers, GP's etc. Important too is the question of whether the psychologist or psychiatrist is known to have a special interest in or skill with school phobics. Schrank (1969) describes a counselling/consultative approach to mild school phobia at elementary school level and indicates that primary school counsellors often deal with mild cases of school refusal without resorting to outside referral.

(b) The Clinic or individual practioner may 'diagnose' the problem differently to the referral source - though this could as much increase as diminish absolute numbers. This draws our attention to the possible interpretative bias of the workers and the definitions they use. Hampe et al (1973) for example point to the tendency to think of refusal to go to school of children with less than average ability as due to factors other than school phobia while Waldron et al (1975) impose on themselves a restriction to the preadolescent period.

(c) At times there may be differential difficulty in distinguishing school phobics from truants. Some workers such as Goldberg (1953) are confident in the purity of the distinction arguing that truancy arises predominantly out of social patterns and school phobia out of emotional ones. Likewise Aldridge-Smith (1974) reports finding personality and physiological differences between school phobics and truants.

Some take a more prudent and cautious approach differentiating truants from phobics the former being regarded as having many features in common with conduct and anti-social disorders (Yule 1977). Tyerman (1968) himself feels that there is more of a continuum involved while Tennent (1969) draws attention to the fact that of children in Local Authority Care for non-attendance 8% were found to have previously undiagnosed school phobic symptoms.

Difficulties such as the above have led some workers to use the more general term 'persistent absenteeism' because of the problem of separating truants from milder degrees of school phobia (Eaton 1979). Despite this the balance of evidence would suggest that school phobics can helpfully be distinguished from other non-attenders especially truants (Hersov 1960).

It is also important to remind ourselves at this point that some of the definitions exclude the possibility of school phobic children having conduct disorders or being truant - thereby introducing a significant methodological problem especially in studies which seek to contrast phobics with truants (Berg et al 1969). It seems that the incidence of truancy in the histories of school phobics has not been the subject of systematic exploration. The present study makes some attempt to redress the balance here by eliciting self-report data on truancy and other forms of non-attendance from all subjects.

A further potential form of bias relates to the fact that in the American work many of the practioners and clinics appear to be in private practice. In one review of 9 studies only one of the clinics was connected directly with the state school system (Gordon and Young 1976).

Despite the helpful work of Berganza and Thomas (1978) in the United States and of Okazaki (1980) in Japan, no review of the literature pertaining to the incidence of school phobia would be complete without mention of the lack of appropriate epidemiological work. In the nearest the British literature comes to such work one study examined over 2000 children aged between 10 and 11 years living on the Isle of Wight. Only three children were found with 'clinically significant' school refusal a further 4 having 'mild fear' associated with school. This gives an upper age specific prevalence rate of .32. Note also that at least double the rate of clear cut school refusal was found in the same population at age 14 years (Yule 1979).

It is highly pertinent here to note that an 'upsurge' of referrals was reported when a special clinic was set up in the United States (Waldfogel et al 1956). They found that in three and a half months 27 cases had been referred. This more than triples the average yearly rate of referral. They conclude that many cases of school phobia persist undetected by ordinary referral methods.

Similarly Hersov (1979) talks of the 'massive underlying reluctance to attend school of a large minority of children' while Heath (1983) comments that school phobia represents 'merely the tip of the iceberg' of children who do not like going to school and who wish not to attend.

Some workers feel that all the physical symptoms so often reported as co-occurring with school phobia can also be present in these children. Shapiro and Jegede (1973) put it thus, '.....many of the children have 'formes frustes' which do not reach phobic proportions. They have early morning nausea and vomiting prior to or on the way to school or habitual dawdling and lateness. These are manifestations of anxiety not yet bound into phobic symptoms'.

However, while it is true that good epidemiological work on the incidence of school phobia remains to be done, there does exist some very thorough work on childrens' attitudes to school and on those who dislike attending.

Perhaps the largest single study which included a measure of child liking for school (or attitude to attendance) is the significant epidemiological work of Mitchell and Shepherd (1967). These workers drew a 1 in 10 stratified random sample of 5 to 15 year olds in Buckinghamshire. Unfortunately the childrens reactions to school were sampled indirectly by parental report rather than via direct child contact.

In this study the parents responded to the question whether the child liked school: 'very much', 'as much as others' or 'disliked school'. They found that 40% of girls and 30% of boys were reported to like school 'very much': 55% girls and 63% boys were reported as liking school 'about as much as other children of their age'. Only 5% of boys and an equal percentage of girls were reported as disliking school. As children got older those children who disliked school had a higher absence rate. There was also a measurable and significant relationship between dislike of school and bad behaviour for boys but not for girls. Additionally 14% of pupils who were said to dislike school were reported by their parents to be worriers in comparison with only 4% of those who liked school. 'Dislikers' were also more likely to have frequent headaches and significantly more frequent stomach pains.

In summary then incidence rates for school phobia have been found to vary from one to thirteen percent of clinic referrals though the validity of this as a measure can be severely questioned. Looking at wider child population estimates, the figures range from 2.76 per 10,000 (under .03 of 1%) to 1% of all younger adolescents. The most widely quoted figure is 17 per 1000 of child population (1.7%). When a mainstream school population is examined, not necessarily in regard to school phobia, but to strong dislike of school the estimates vary from 5% to 8%. Many writers appear to feel that the size of this problem may be seriously underestimated. The present study seeks to clarify some of the issues highlighted here.

Chapter 3 Major Aetiological Theories

The sections regarding definitions and incidence have preceded this section on causal theories in order to provide the background information necessary to establish some form of perspective. However not all workers have declared a theoretical allegiance nor have the definitions always seemed wholeheartedly tied to a particular model.

What is proposed here is that the major theoretical positions are outlined and then the literature more generally reviewed with reference back to the theoretical features as appropriate. To be included a theory properly ought to include the following two characteristics (1) It should explain the known facts in a parsimonious manner and (2) it should be capable, at least in principle, of generating testable hypotheses.

Theories are to be reviewed under 4 main headings. Firstly Psychodynamic - in particular psychoanalytic theories - will be looked at: secondly approaches based on Learning theories; thirdly Ecological/Systems theories and finally Phenomenological theories.

It is not being claimed that what follows is an exhaustive account of each theory - rather it is hoped to provide an overview tied where possible to published research on school phobia.

(a) PSYCHODYNAMIC THEORIES

If one were to seek to evaluate the status of various theoretical positions in terms of the number of published papers then those under the psychodynamic umbrella would head the league table.

This theoretical stance refers back to the seminal work of Freud who, in one of his formulations, considered that the complex of sensory, motor and physiological experiences which flood suddenly on the immature nervous system at birth to be the basis of all later anxiety reactions.

The argument seems to be that the first, diffuse, sense or feeling of danger becomes more sharply focussed as the infant learns that the appearance and disappearance of the feeling of 'unpleasure' are associated with appearances and disappearances of certain people (objects in classical Freudian theory).

The anxieties generated during these primal experiences can, it is argued, consequently be displaced from the danger situation - essentially one of helplessness - to the determinant of the danger ie loss of the person (or object) and the available 'modifications' or reactions to that loss. This theory argues that the dangers become even more specifically focussed during the 'phallic phase' (broadly between 2 and 5 years in this conceptualization) as the child comes to fear a more 'defined type of separation namely castration'.

In Freud's view there are three components in anxiety: (1) 'a specifically unpleasurable quality' (2) Efferent or discharge phenomena' and (3) 'the perception of these'. If one examines these three components of anxiety namely its unpleasantness, its physiological concominants and the conscious experience there is little to dispute. Harder to give credence to are the elaborations of the descriptions of the components of anxiety as experienced into a substantive theory of phobia.

Freud regards phobias primarily as defensive reaction to conflicts. The phobic object itself ie the thing feared is a specific external object upon which the internal, instinctual danger (or conflict) is projected. It is Freud's view that the anxiety the child experiences in the presence of the phobic object is a danger signal set off by the ego and the danger being signalled is 'invariably the danger of castration' (Freud 1949). Implausible though this theory is even in the case of males it is specially inadequate to account for the development of phobias in females. This remains so despite attempts to modify the early theories in an attempt to give them greater validity in this regard (Freud 1964).

A causal model derived from psychoanalytic thinking and extensively applied to the genesis of school pobia is that of 'separation anxiety' This was one of the most important early models and remains heavily influential (Gordon and Young 1976).

School represents the first obligatory separation from the protection of home and mother (Waldfogel et al 1956). Eisenberg (1958) uses the expressive phrase 'the umbilical cord being tugged at both ends' to enliven the description of what seems to be happening.

Many writers on school phobia have been expressly influenced by this theory and adopt an explanatory approach based on the notion of separation anxiety which derives from this theory (Johnson et al 1941, Coolidge et al 1957, Walfogel et al 1959, Gittelman-Klein and Klein 1980).

However a certain over inclusiveness occasionally seems to accompany the use of this model with the effect of broadening it to a point approaching meaninglessness. Gittelman-Klein and Klein (1980) point out that it is possible in their view to have anxieties regarding separation in the absence of overt evidence of being unable to separate.

It seems likely that part of the confusion may relate to an under-analysis of the concepts involved. A fundamental distinction here is between separation as a process and as an event. The normally developing child whose physical and emotional needs are met and reasonably satisfied particularly through his/her relationship with the mother gradually moves out of his dependant state and develops a growing sense of individuality and self awareness.

The term separation is actually used in two senses: firstly the premature removal of the child from its biological mother ie separation as an event and secondly separation as a psychological process between mother and child during which the child gradually learns to cope with increasing levels of independence (Allen 1955).

It is clear that many writers on school phobia who utilize the notion of separation in their work seldom explicitly acknowledge the above distinction. It is equally clear from the prevailing tone of the literature that most workers would regard the problem as arising in the process of separation though sometimes the number of physical separations (events) from mother is considered.

Within this context it is important to distinguish maternal separation from maternal deprivation. Some work which claims to show the effects of separation may actually be measuring the results of other conditions such as deprivation which may be manifest as a reduction of (or lack of) tactile, kinesthetic, auditory or other kinds of stimulation normally provided by the mother (Yarrow 1964).

It would seem that separation and its consequences are an altogether more diverse and complex phenomenon than is often indicated. One needs to consider the child's developmental status, quality of relationships prior to separation, quality of subsequent experiences etc to make a full evaluation (Yarrow 1964).

Almost all the psychoanalytic literature is presented in terms of clinical studies - frequently with illustrative material from one or a very small number of 'patients'.

Clearly great caution is needed in a situation like this and Gordon and Young (1976) remind us that , though one cannot dispute the usefulness of clinical reporting, its scope should not be extended beyond its hypothesis generating function.

Controversy continues to surround many of the notions and interpretations within this framework not least because of its unsatisfactory treatment of the phobias and reactions of females.

Perhaps the wisest course here is to follow the counsel of John Bowlby - himself writing from a psychoanalytic perspective when he states:

> "It seems most unwise to adopt an explanation solely in terms fo unconscious wishes before an explanation in terms of experience has been thoroughly investigated and shown to be inadequate"
>
> Bowlby (1973)

(b) LEARNING THEORIES

The approach to accounting for school phobic reactions most frequently juxtaposed to the psychoanalytic account is that often subsumed under the term Learning Theories or sometimes more loosely and misleadingly Behavioural Theories.

Within this approach the basic position adopted is that neurotic behaviour is acquired by exposure to life experiences ie it is learned. Though often set in antagonism to psychodynamic theories there are considerable areas of overlap eg Yates (1970) provides a very convincing 10 step account from a behavioural perspective of how separation anxiety is acquired.

It has been noted that school phobia incorporates features of both operant and respondent varieties of learning theory. Initially the response serves to reduce fear (along classical conditioning lines) but then the non-attendance is maintained by reinforcements in the home (Ross 1972). By way of illustration of this Garvey and Hegrenes (1966) provide an account of a behavioural treatment of a client's problem which included the alternative attraction of television and toys at home. Others also encourage the search for 'often overlooked' environmental factors maintaining school phobia (Long 1971) and Jones (1960) indicates that some neurotic behaviour results not from learning an unadaptive response but from failing to learn an adaptive response.

Basically the learning theory approach involves the following three stages; (a) Separation from parents functions as an eliciting stimulus (b) the eliciting stimulus produces an anxiety reaction and (c) the anxiety reaction results in escape or avoidance behaviour - school phobia (Patterson 1965).

It is probably fair to say that writers from this perspective have been more critical of features of their own account than the equivalent workers from the psychoanalytic camp. Rachman (1978) for example lists six problems with the conditioning theory of fear acquisition. Although not all are directly relevant to the development of school phobia it is instructive to list them as a means of providing a critical backdrop to the theory.

(1) People fail to acquire fears in theoretically fear evoking situations. (2) It is difficult to produce conditioned fear reactions in human subjects even under laboratory conditions. (3) The conditioning theory rests on the untenable equipotentiality premise that stimuli are equally likely to become fear evoking. (4) The distribution of fears in normal and neurotic populations is difficult to reconcile with the conditioning theory. (5) Many phobic subjects recount personal histories that cannot be accomodated by the conditioning theory and (6) It is known that fears can be reduced by vicarious processes and it seems highly likely that they can be acquired in a similar way.

(c) ECOLOGICAL/SYSTEMS THEORIES

While it is true that theories from a psychoanalytic or learning perspective have dominated the published research on school phobia there have been workers concerned to look at the problem within a somewhat wider framework. This is here subsumed under the rubric of ecological or systems theories.

One of the first workers to make the primary focus of his work what he called the 'ecological framework' was Salvador Minuchin who put his view thus:

> "A childs behaviour is caused by many factors. Some are inside the child like neurons, brains and glands, as well as memories, motivations, introjects and drives. Outside the child are factors like his parents, his siblings, his families socio-economic status, his house, his school (teachers, peers, curriculum), his neighbourhood, his neighbourhood peer group, the hue of his skin, television and many others" (Minuchin 1970).

Such a model has been applied directly to school phobia. Indeed it has been argued that school phobia is best understood by an analysis of the relative contributions of all behavioural levels from biological through to national (Bolman 1967).

The eight levels of analysis felt to be possible have been listed by Bolman (op cit). These are (1) Organismic (2) Intrapsychic (3) Interpersonal (4) Familial (5) Organizational (6) Institutional (7) Community and (8) Regional and National.

Little British or American work seems to have been done linking national philosophies or approaches to issues such as school phobia either at the level of individual reaction or in terms of incidence. The situation as regards Japan seems rather different. It has been suggested that the rate of school phobia in Japan is related to upwardly changing national pressures to succeed (Wakabayashi 1982). Additionally comment has been made in relation to Japanese school phobics perceiving themselves as 'unusual' which is felt to be influenced by the stereotyped sense of values in contemporary Japanese society in which a good school record and academic career are thought to be important (Tsuji 1981).

While it seems possible that such pressures are at work it is likely that they are mediated by other social mechanisms rather than being often apprehended in a more direct sense. Such a mediating institution could be the school in terms of pressures to maintain a good school average rate of examination passes or the family with a desire to see the child have a good future. Outside these rare considerations of national influences ecologically minded workers have singled out three areas: (a) the family (b) the school and (c) their interface.

(a) The family approach

This point of view is well represented by Messer (1964) who is explicitly of the opinion that school phobia expresses publically a disruption of the family equilibrium and regards it as important to embark on the treatment of the family as a unit. Others take a similar view eg Malmquist (1965) regarding some families as 'phobogenic'.

This view of the importance of the family is not restrictd to psychologists and psychotherapists. In one study classroom teachers attributed school phobic reactions to the family situation in 55% of cases (Okazaki 1980).

A number of writers have found poor marital relationships over represented in their phobic groups (Van Houten 1948, Goldberg 1953, Talbot 1957, Estes et al 1956) while others have taken a very different line. The work of Berg et al (1981) is instructive in this respect. They failed to find any differences between families of school phobics and other psychiatric cases on a whole range of variables.

Not all those who take a family orientation feel that it is the total explanation and some caution against the tendency to invoke family dynamics as the sole explanation so ignoring individual psychopathology and social experience outside the family (Malmquist 1965)..

Some writers interested in more general problems of school attendance suggest that family dynamics may not always be fundamentally important (Tyerman 1968, Eaton 1979). Furthermore it has been pointed out that the same sort of family transactions (as occur in families of school phobics) have been observed in other families without causing school phobia and that it is unusual for more than one child to be affected (Kessler 1966).

One of the most thoroughgoing, detailed and systematic evaluations of the role of the family in the development of psychopathology involved a review of research over a 40 year period. It was concluded that no factors could be identified as unique to the families with problems (Frank 1965).

A basic problem in seeking to evaluate the various studies involves the fact that many workers do not declare their criteria for evaluation or the models they use to assess normality/deviancy. Often there seems to be a dependence on personal/clinical judgement which is likely to vary radically from one worker to another.

Furthermore it can be very misleading if there is a substantial generalization from a small number of families and an insufficient base of information on the dynamics of families where there does not appear to be a particular problem. While it remains problematical to specify the nature of healthy functioning in family terms it is hazardous to invoke notions of pathology.

(b) The School Approach

The papers reviewed in this section are those which highlight features of schools as organizations rather than idiosyncratic features of particular schools.

In one of the few non speculative papers in the area Kulka et al (1980) examine three composite measures of what they call school misconduct: (1) school crime (2) school avoidance (3) class misbehaviour. They report significant relationships between dimensions of student/school fit and the 3 indices used.

These workers furnish a useful model composed of four basic elements: (a) The Objective Environment ie the environment which exists independently of the perceptions of the individual subjects (b) The Subjective Environment which represents the subjects' perceptions and cognitions of relevant aspects of the above (c) The Objective Person - abilities, needs, values etc which are enduring and (d) The Subjective Person - broadly the individual's concept of self.

Although they do not make it explicit it is clear that these workers regard good adjustment to school as following from a complementarity among the above four dimensions - in short from good student/school fit. Such a view would help explain why some schools can be right for one pupil and entirely wrong for another. It avoids the need for value judgements about either school.

In an impressive paper from Finland the school phobics reactions to school are given a detailed examination in terms of the school characteristics. The school phobic subjects were matched for age and sex with non-phobic pupils from the same school (Ojanen 1980).

The results indicate that there was no significant interdependence between the teachers anxiety and the pupils' fears provided that the teacher does not employ what Ojanen calls 'phobic mechanisms' in handling the situation. Such mechanisms would involve denying the symptom or over identifying with the pupil. The best combination proved to be an emphatic, interactive teacher whose warmth and firm control of the situation contributed to the outcome. The worst combination was much or no anxiety, no empathy, lack of ease in interaction and teaching style (Ojanen op cit).

Though there are obvious hazards in transferring findings from one cultural domain to another Ojanen's work is stressed since it is the only thorough evaluation completed with a phobic population and looking at teaching styles. It is instructive at this point to note that two thirds of the school phobics in Ojanen's sample viewed their class teachers in a very negative light and one third in a very positive light and to speculate on a link between this and the finding of a bi-modal distribution for anxiety in the classroom among a sample of British school phobics (Heath 1983).

Though more in the form of speculations and theoretical asides than of structured work such as Ojanen's, a number of researchers, reviewers and writers on both sides of the Atlantic and over considerable periods of time have implicated teacher characteristics as important in school attendance problems including school phobia (Klein 1924, Dayton 1928, Frick 1964, Moore 1966, Shapiro and Jegede 1973, Dombrose 1955, Jarvis 1964).

Some, however, do not consider the impact of teachers as individuals to be the important aspect. It has been found that persistent absence in adolescence is more linked to the pupils' belief that school failed to meet their emotional needs than with attitudes towards home and that the absence may be caused or precipitated by features of the schools ethos (Eaton and Houghton 1974). This may in part be mediated by an association between academic self image and attainment which has been linked to organisational features of the school (Kavanagh and Carroll 1977), or the educational philosophy of the head teacher (Shapiro and Jegede 1973).

It is probably helpful to conclude this section by embedding the discussion of school impact in terms of phobic anxiety against the background of the whole question of the differential effect of school experience. This issue has attracted more systematic attention in recent years.

The 'Coleman Report' (1966) in the United States and the 'Plowden Report'' (1967) in Britain seemed to launch a decade of pessimism regarding the more positive potentialities of mainstream school to effect real change or have an impact given the apparent pervasiveness of home background features.

This early work and its attendant gloom acquired an orthodoxy despite coming in for some vigorous methodological and theoretical scrutiny and reanalysis (Dyer 1968). Furthermore and perhaps more importantly better designed research has begun to redress the balance. It is now being argued that the social ethos of schools contributes significantly to their differential effectiveness (McDill 1973) and to attendance even after controlling for such factors as verbal reasoning ability and fathers occupation (Rutter et al 1979).

It would appear, therefore, that the school as an organization and as a community has a bearing on how pupils feel and perform. This is an area which is likely to attract more systematic research interest in future despite the difficulties in measuring such aspects of a schools functioning as 'ethos'. It is unlikely however to generate much that is new by way of insight unless consideration is given to the interface between the worlds of home and school.

(c) The home/school interface

Although it might seem self evident that the interface between home and school would have considerable potential to generate difficulties not many writers on school phobia have dwelt on it to any great extent. Published work is therefore rather spartan in this area with some useful exceptions.

There is some evidence that the psychological impact of school experience has more impact on self image and attitude than on cognitive functioning (Minuchin et al 1969). Their very detailed study concluded that it is 'impossible' to search for the relative influences of home and school as the child is always affected by both. Despite this general point they felt able to comment that the schools affected the lives and functioning of the children in ways that are pervasive and perhaps profound. The flavour and emphasis of their work is very much one of the interaction of home with school factors.

Other work more specifically concerned with school phobia reaches a similar conclusion pointing out that while the school phobics problem might be in the family, or in the school it is more likely to be in the interface between them (Haley 1971). Some give this a more clinical flavour in implicating a conflict of loyalties between school and its personnel on one hand and the home dominated by a psychiatrically disturbed mother on the other (Bonnard 1955).

More recent research from a British perspective points in the same direction indicating that difficulties may arise in at least some cases from problems in the interaction between school and pupil characteristics (Heath 1983). Mostly the mechanism proposed has been strongly influenced by psychoanalytic thinking and involves notions of school and learning being from the start 'libidinally determined' (Klein 1924), with the child seeing the teacher as a parent substitute and in the case of the neurotic child acting as if they were identical (Dombrose 1955).

In practice it is difficult to evaluate much of the work commenting on the interface between home and school especially when it is written from a mostly clinical perspective. Once again the difficulties relate to problems in operationalizing some of the notions sufficiently to allow for a sharing of criteria. The resultant problems raise issues regarding the validity of any conclusions drawn.

The application of more rigorous criteria in methodologically more sophisticated studies with sample sizes which permit more detailed analysis is awaited in order that many of the problems in the literature can be resolved. What we have is a set of intriguing possibilities of high face validity with the rudiments of evidence beginning to emerge.

(d) PHENOMENOLOGICAL THEORIES

The meaning attached to the word phenomenological in its present use in psychological thinking is substantially different from those meanings it posseses in more philosophical circles although a lineage can be traced from the writing of Husserl (1964) via various existentialist thinkers (notably Karl Jaspers 1919) through the psychiatry of Rollo May (1950) to the more expressly psychological views of Kelly (1966) and Rogers (1959), which remain important influences in Britain.

Phenomenological psychologists stress that the individual reacts to his world in terms of his unique perceptions of it. It is felt that it is his/her particular way of construing (perceiving) which dictates (or in softer vein influences) his behaviour. This view has received a very confident, hard-line, encapsulation in the work of Snygg and Combs (1949) who appoint themselves the task of writing psychology from a phenomenological frame of reference. This undertaking is predicated on the notion that 'all' behaviour, 'without exception' is completely determined by the phenomenal field of the organism.

The overstating of the case by Snygg and Combs should not detract from the core usefulness of the idea and its influences. Though George Kelly himself denied a direct link his Personal Construct Theory is highly phenomenological in flavour (Kelly 1966).

In a similar vein and somewhat earlier Carl Rogers had highlighted a related package of issues when he pointed out that it is the perception of the environment which constitues the environment regardless of how this relates to some philosophically postulated reality (Rogers 1959).

Given that it would seem on the face of it that these ideas would be highly relevant to a situation characterized by a very intense personal reaction to a particular setting and given, too, the importance of uniquely intense experiences in this approach it is more than somewhat surprising that so little has been written from an overtly phenomenological viewpoint in regard to school phobia.

Some writers have used the word phenomenological without adding anything to the meaning being expressed such as the assertion that school phobia may be defined phenomenologically as 'a partial or total inability to go to school which results from an irrational dread of some aspect of the school situation' (Eisenberg 1958). Perhaps more validly others have argued that the childs level of fearfulness in respect of school reflects the level of threat he perceives in the school environment (Rhine and Spencer 1975). Something of a middle ground is occupied by those who feel that it is the fact of perceiving themselves to be failing in a more demanding educational setting which is important in causing school phobia (McArthur 1961).

A similar point is made by Weiner (1970) who relates such changed demands to a more elaborate theoretical structure and highlights the association with transition points in the pupils career.

It has been sought to establish something of an overview of the four major theoretical systems pertaining to the aetiology of school phobia. It must be said at this point that these positions are not in any simple sense mutually exclusive. Indeed one can readily generate a hypothetical case which would share features of each.

Such a case might be as follows. A child might attend a particular school where there is a mismatch between features of the school organization and his unique psychological make up (thereby requiring something of the ecological/systems perspective). He may be anxious about separating from home (which many psychoanalytic writers feel to be the primary cause) and that this reaction has been, at least in part, learned (the behavioural perspective). Adding a final assumption that he perceives the school situation as uniquely threatening (as phenomenologists would readily accept) and a vignette has been produced with at least some of the characteristics of all four models.

Having begun by looking at definitions of school phobia and estimating the incidence, followed by an outline of the major theories we now move to an evaluation of the research in some of its more specific considerations.

Chapter 4 Research Findings

In order to impose some structure on the task of looking at the more detailed literature it is proposed to break down the material into analytic units in terms of decreasing levels of generality. The first and most general level is the school situation as a source or cause of anxiety: the second is the home and family and the third characteristics of the individual child.

(1) SCHOOL

The literature on the school situation will be examined in terms of the extent to which the pupils anxiety relates (a) to his/her teachers and/or structural or organizational features of the school, (b) to anxieties regarding performance on academic work and (c) to anxieties regarding relationships with the peer group.

(a) Anxiety regarding teachers and organizational features of school

A number of writers from very different theoretical persuasions have suggested that the role of the school in the genesis of school phobia is of considerable importance. Some, though writing from a family dynamics approach, warn against the tendency to invoke such (family) explanations as the sole possibility at the cost of ignoring individual psychopathology and the childs experiences outside the family (Malmquist 1965).

It has been pointed out that a systematic examination would indicate a dozen possible sources of school phobia in the school itself (Eysenck and Rachman 1965). One worker found that school phobia group membership could be predicted 75.4% of the time by reference to home related anxiety and also predicted 65.7% of the time by reference to school related anxiety (Blagg 1979).

In a conceptual analysis of the clinical literature Kline (1945) identified three possible sources of anxiety in school which approximate to the classification used here namely fear of the teacher, fear of other pupils and fear of failing in school work.

A statistically more complex and at times methodologically more rigorous approach has been chosen by those workers who make use of factor analytic techniques to reduce the wide range of specific items encountered to more manageable proportions. In such a study of children's fears in general Miller et al (1972) identified three factors; the third of which included school and examination fears (the others being fear of physical injury and/or natural or supernatural dangers). Unfortunately this work is limited in being based on information elicited from parents rather than the children themselves.

Specific teacher related anxieties have been reported by some workers. In one of the earliest appearances of this notion Jung (1911) reported a case of a girl who developed nausea and headaches and could not attend school.

Jung's interpretation, very much a child of its times, involved regression and an incest complex which had become displaced to a male teacher.

Whatever one thinks of the explanatory value of this model the implication of anxiety centering on the teacher is clear though in the case quoted this was not due to any particular action or behaviour on the part of the teacher but related to such immutables as the fact that the person was a male in the authority role of teacher.

From a similar theoretical position a number of other workers have nominated reaction of child to teacher as generating anxieties or difficulties about attending school - frequently with the implicit or explicit premise that somehow the teacher becomes a substitute for the parent (Klein 1924, Broadwin 1932, Dombrose 1955). Here the teacher is as it were inadvertently caught up in the issues without directly contributing to them.

Unfortunately writers from the above perspective are so persuaded of the underpinning model that it is not felt necessary to adduce particular evidence that this is happening, why it is happening at that time or why the particular teacher or why all children are not equally affected. The requirement appears to be to find how the facts can be made to fit the given explanatory model rather than an examination of what is happening and the production of an appropriate model to account for these facts.

Other commentators introduce the possibility of a more active teacher involvement by suggesting the notion that some feature of the teacher's style or behaviour is relevant. Included here are fear of being shouted at (Chazan 1962), the importance of sympathetic class control (Dayton 1928, Moore 1966), difficulties relating to adjusting to a new teacher (Waldron et al 1975) and a more general fear of the teacher possibly based on a mismatch of pupil and teacher characeristics (Tyerman 1958, Ojanen 1980).

The idea that teacher personality (rather than behaviour) might have a role to play has been speculated on by Frick (1964). This idea was more thoroughly investigated by Ojanen (1980) who found a complex relationship between the phobic child's control of his symptoms and teacher personality. His study appears to be the only work published to make this one of the central aspects of the dynamics. He also points out that two thirds of his phobics had strong negative reactions to their teachers and one third strong positive feelings.

However not everyone has found that school related features are important. One researcher compared a group of school phobics with a truant group and examined variables such as class and school size, methods of organization, rewards and punishments, etc and concluded that the role of the school in school phobia is minimal (Cooper 1960).

It may well be that processes more subtle than absolute school or class size are at work. No attempt was made to ascertain whether the pupils themselves regarded the school as large or small. Cooper (op cit) did however confirm that school phobia tends to emerge at times of change of class or school.

(b) Anxieties regarding academic failure

The whole question of anxieties regarding school work and progress is vast and multi-faceted. In relation to the school phobic population there are at least three potentially relevant dimensions. Firstly there is the fear of the humilation of failing in the eyes of (potentially) mocking peers. Secondly there is the fear of disappointing or engendering anger in teachers or parents and thirdly there is the fear of failure to live up to ones own expectations and standards.

Inevitably there is likely to be some overlap between this section and the later section on ability. However the main distinction is that in the present section we are concerned with the child's personal reaction rather than any reality based or objectively determined level of retardation in ability. One should remember here that fear of failure was one of the three possible sources of anxiety regarding school (Klein 1945). Additionally worries regarding school have been been identified as of major importance in large scale research on childrens' fears (Angelino et al 1956).

It is important to bear in mind a clear conceptual distinction between real educational difficulty in terms of learning problems and the fear of failure which does not necessarily require a reality base to be potent.

It has been pointed out that there is evidence to suggest that educational retardation should not be discounted as a factor in the causation of some cases of school phobia (Chazan 1962). However far more common than authenticated difficulties in terms of learning are the many reports in the literature concerning the pupils expressed anxieties in this regard. Talbot (1957) found that every one of her subjects expressed some apprehension in relation to academic potential. Hersov (1960) in a methodologically much sounder study indicates that 28% of his sample of school phobics gave this anxiety as their primary reason for non attendance while Waldron et al (1975) found that half of their school phobics feared failure whereas this was not reported by any of their 'other neurotic' control group.

In a similar way Ojanen (1980) indicated that imagined failure can play an important part in the causation of school phobia. Perhaps such findings should not come as a surprise given that other work has indicated that as many as 10% of the mainstream school population experience anxiety about tests in school and make the self-judgement that these anxieties are severe (Konas 1967).

However it would be wrong to conclude that the situation in regard to attainment and belief about attainment is straightforward. In a very large series of 100 school phobics it was found that, while formal tests of attainment (of the variety which predominate in the literature), did not indicate special problems about half of the group were regarded as having educational difficulties by their teachers (Berg et al 1975). One must here presume that the teachers are judging by the actual classroom performance rather than test based snapshots. In this regard it is worth recalling that there is a possibility that school phobics may have their ability over estimated by teachers (Heath 1983).

One must also note that not all workers have been able to substantiate the fear of failure hypothesis. In one study employing specially constructed 'fear of failure' and 'need to do well' measures, it was concluded that the school phobics did not score significantly higher than controls on these dimensions (Heath 1983). It is clear that something more than strict educational failure (real or self perceived) must be at work in that we have the paradox of poor and unsuccessful learners not necessarily being reluctant to attend school (Kessler 1966).

It is difficult to account for some of the differences in the reported results. One must be mindful however that the samples were drawn from very different populations and not only may the definitions of school phobia have differed but the means of measurement have been somewhat ad hoc.

(c) Anxiety relating to peer interactions

School is not merely a building in which the formal process of information transmission takes place but is a dynamic, challenging, social context which can be of very different sizes and function at varying levels of organizational complexity with a range of communication climates. Vernon (1969) reminds us that childrens' behaviour is determined 'not so much by what adults allow and approve but what other children permit'. Rather more philosophically Scheler (1916) writes 'there is no I without we'.

Workers using a factor analytic approach to the question of attitude and motivation in regard to school have identified both the need for social recognition (Chiu 1967) and for co-operative relationships with peers (Kozeki and Entwistle 1984).

Given such antecedents it is not surprising that the inability to maintain satisfactory interpersonal relations with peers, teachers etc is seen as an emotional handicap which has the effect of behaviourally limiting the child (Partridge 1939, Bower 1969). There is something intuitively right about this assertion. It is easy to empathize with the distress and difficulty experienced by a child who lacks the necessary social skills for friendship making. Rather more problematical is the issue of the child who appears to lack motivation in this area.

Researchers into the issue of peer relations have approached the problem from a number of angles. Firstly there is epidemiological evidence that quiet and withdrawn behaviour are among the most frequently reported features of children in the middle school years (Shepherd et al 1971). It has also been found that excessive reserve is reported by the parents of a third of normal 11 year old boys and girls (McFarlane et al 1954).

There is now a substantial body of literature pointing to a close association between inadequacy in social relations and indices of maladjustment and disturbance (Bonney 1943, Northway 1946, Moore 1966, MacMillan et al 1978, Bauer 1971).

The use of sociometric techniques has not always been accompanied by an appropriate regard to some of the limitations (Schwarzwald et al 1986). None the less the evidence which exists tends strongly to suggest that a general acceptance score is a better predictor of truancy than behaviour ratings by teachers (Croft and Grygier 1956), that sociometrically measured poor status is linked with the presence of psychosomatic ailments (Izard 1959), and with social immaturity (Shaw 1954).

Unfortunately individual writers do not always make clear which aspect(s) or dimensions of the interpersonal domain is under consideration. Is it a question of popularity? Or of rejection? Is the issue bullying or self perceived difficulty in making and maintaining friendships?

The present evidence suggests that it is unwise to make the assumption that popularity is the converse of rejection (Hartup 1970, MacMillan et al 1978). Some writers have highlighted the possibility that at least part of the problem is of fearing other pupils (Klein 1945, Hersov 1960, Chazan 1962) though in most cases this related to some part of their sample and was indexed only via self-report. It is possible that this is an alternative form of fear of bullying which some have felt to be important (Blagg 1979, Heath 1983).

Having a sense of finding it difficult to make friends is frequently commented upon by the pupils themselves though the issue of losing (or of having difficulty in keeping) friends is not ignored (Langford 1937, Van Houten 1948, Hitchcock 1956, Marklund 1973, Shapiro and Jegede 1973, Davidson 1960, Cooper 1966).

There appears to be something of an international consensus on the importance of the friendship issue in school phobia. Besides the British and American work highlighted above, Marklund (1973) from a Swedish perspective comments that truants are anxious and of low social status and have difficulty in dealing with their peers. Finnish research has indicated that 66% of school phobics adopt an attitude of timidity, helplessness, inhibition and passivity towards their peers (Torma and Halsti 1975).

Japanese epidemiological work has shown that 39% of the school phobics are regarded as being shunned by their peers (Okazaki 1980), while in another study it was noted that school phobics tend to feel alienated (Tsuji 1981).

From a West German perspective Mattejat (1981) indicates that school phobics often feel threatened in school and Comiti (1976) adds a French voice when he identifies two patterns of response among school phobics - the one of interest in this section being inhibition and excessive reserve.

It must be said that, though the above papers all make reference to the interpersonal issue, sometimes it is with regard to a small proportion of the total phobics in the samples. Additionally the measurement methodologies have ranged from personal judgements to well developed sociometric scales.

It may well be that what is happening here is the preliminary, informal identification of sub-types in which the friendship domain is specially important. In one classification of school phobics one of the two groups was regarded as limited in their ability to form meaningful relationships (Weiss and Cain 1964) and Coolidge et al (1957) make the point that there were more pupils with interpersonal difficulties in the sub-group they label 'Characterological'.

Given the variations in the range and sophistication of papers in this area it may be worth giving special attention to the work of Ojanen (1980). His is one of the most thorough investigations in the field. His research strategy involved a very careful matching of a sample of school phobics with a group of non-phobic pupils drawn from the same school classes as the phobics attended. Factor analysis of the 38 variables included in the study led to the emergence of 9 factors. Of special relevance here are the first factor which he labels 'fear of school mates' and the fifth factor which is labelled 'difficulties in interpersonal relationships'.

It is of interest that these two dimensions emerged as separate factors since on the face of it they appear conceptually closely related. Ojanen's further analysis of the fear of school mates factor led him to the view that there are 5 types of manifestation of this problem in his subjects : (a) Lack of opportunities for emancipation (b) Sibling envy felt for other pupils (c) Serious identity problems (d) Fantasies of physical injury and (e) Social fears related to a variety of things.

Ojanen focuses on the use of sociometric measures. In terms of sociometric 'choice' and 'rejection' measures he found that the intergroup differences did not reach statistical significance even though the school phobics consistently scored lower on positive features than other pupils.

The phobics proved neither to be among the most popular nor unpopular in their classes. There was a tendency for phobic girls to be found to be somewhat more popular than phobic boys but both were overall regarded as more solitary.

Few workers seem to have paid any special regard to the question of whether the social difficulties have a directly causal effect or whether the school phobic reaction occasions the social withdrawal. Some have pointed out that school phobics seem to become more socially withdrawn (Horowitz 1962, Gittelman-Klein and Klein 1980).

It has been proposed that school phobia is a product of having received a special kind of nurturance at home which creates an illusion of self-worth which is challenged by the social and academic demands of school (Radin 1967). Earlier Levanthal and Sills (1964) had proposed a similar theory predicated on the notion that school phobics have a form of inflated and unrealistic self esteem. However in his thorough analysis of this hypothesis Heath (1983) found no evidence for raised self esteem in phobics - indeed he was able to demonstrate the reverse.

Another possible model is sugested by some work by Leach (1972). Though working with much younger pupils than the generality of British school phobia research he found that children having difficulties entering into school activities directed less behaviour toward others.

They were also notably less responsive to overtures from their peers. This led to a corresponding decrease in other children seeking to interact with them. All of this suggests that failing to cope with the social demands of a situation can lead to impoverished social experiences and a likely diminution of enjoyment in such situations. It does not however explain why some children have such difficulties in the first place.

That the social world of the child in school is part of a larger matrix of possible influences than the above implies is reflected in the work of Rose (1966), who matched pairs of secondary school classes for size, age, and sex of pupils. Each pair consisted of one badly behaved class and one well behaved class as judged by teachers ratings. Sociometric measures were used directly with the children.

Rose noted that teachers of badly behaved classes were less aware of the sociometric structure of their classes than their colleagues in well behaved classes. If one considers that differences in ability to make such judgements might mean that in some classrooms the teachers may be less aware of the growing isolation (or other social distress) of certain pupils the situation for such children might become quite serious before appropriate action was taken.

When one adds to this, the possibility raised by Heath (1983), that the teachers of school phobic children may tend to overestimate these childrens abilities the scene is set for a substantial mismatch between the childs needs and abilities on one side and the reactions of significant others to him on the other. Such an account would avoid the hard to verify explanatory assertions in the omnipotence model (Radin 1967).

Within the school setting it may not only be teachers who unintentionally create difficulties for some children with anxieties regarding attendance. One American study of age differences in children's attributions of the causes for various kinds of deviant behaviours included a school phobic reaction as one of the five vignettes used. It was found that the children used psychological causes to account for school phobia whereas they used other explanations for other behaviours. There was a clear age trend in the willingness (ability?) to use psychological attribution with older children being more inclined so to do (Chassin 1983).

It may be that the class mates of phobic children may subtly alter their behaviour towards peers in line with these attributions and that these alterations are not only perceived but seen as threatening by the phobic child already sensitive and possibly bewildered by their own reactions. This must of course remain speculative for the time being.

Lest one be tempted to regard such reactions as new responses to the complex demands of our society a quote from Kline (1898) adds an historical perspective. Writing in regard to what he called his 'nostalgia' or 'lovers of home' group he indicated the existence of a large class that 'make few friends, are retiring in disposition, dread meeting strangers, entering a new place or even sleeping in a strange bed; they are in constant dread when among strangers either of boring somebody or of getting bored.....' In pursuing his argument he draws a strong link between 'fear of persons' and 'love of home'.

Summarizing it can be seen that many writers comment on aspects of the social world and (implicitly) social skills of the school phobic child. However with the exception of Ojanen (1980) none seem to have made it a central focus in their work. This appears to be a strange omission in a large literature dealing with a problem in which the inability to be with peers in the school setting is a prominent descriptive feature.

The above overview of the more directly school related aspects of the school phobics response highlights many of the difficulties in navigating a path through the undergrowth of rather unclear thinking and contradictory findings. It is, however, now possible to turn to the next most general level of analysis namely that of the family. This will be considered in terms of family size and of social class.

(2) HOME AND FAMILY

(a) Social Class

While it is perhaps true to say that a wider range of child specific features have been investigated than any other area the predominant theoretical thrust - certainly in the United States - has been to focus on the child in relation to his or her family - with the almost inevitable examination of the wider context in which the family functions.

A problem emerges in regard to social class at the outset. Though writers with many differing points of view comment on this variable there is no agreed means of allocating a family to a particular level of social status. It may be helpful to sketch in the findings on social class which have emerged from the wider areas of research into non school attendance. For a detailed review see Reid (1980).

Though there are known to be marked regional variations in rates of truancy (Fogelman and Richardson 1974) there has been a fairly systematic finding of an important social class effect. Poor attendance is two to three times higher among children whose fathers are in manual occupations (Fogelman et al 1980, Galloway 1980). It must be noted however that research in this area is vulnerable to contradictory findings thus Tyerman (1968) found no significant relationship between rate of attendance and numbers on free school meals.

Given the definitional and indeed research design problems which are encountered in this field considerable caution is needed even when the scope is narrowed to concentrate on school phobic pupils.

Firstly it must be noted that no sample of school phobics can be regarded as truly random. This is because they have first to be referred by someone who recognizes a problem and this referral must be to someone who will use (and in a sense be entitled to use) this particular label. By the time the clinical researcher working through a child guidance clinic or hospital department sees and evaluates a child several levels of selection may have already taken place (Heath 1983). Even at the clinical level the lack of agreed definition may lead to a child being classified in some other category with the anxiety regarding school attendance being accorded low status.

In a review of 9 studies on school phobia it was noted that only one clinic was directly connected with the state school system thus creating real bias in the sample (Gordon and Young 1976). Furthermore the question of private practice is a powerful source of bias (Milman 1961, Talbot 1957). Even where workers have been at pains to point out relevant social class dimensions in their samples their caution is often lost in the simplifying process of citation and even more substantially with secondary citation.

Though some workers have found social class to be a relevant variable (usually in the direction of suggesting that social classes 1 and 2 are over-represented in school phobic samples) when compared with truants and sometimes other conrols (Hersov 1960, Cooper 1966), the prevailing finding has been that social class is not a fundamentally important variable (Nursden 1958, Chazan 1962, Estes et al 1956, Eisenberg 1958a, Leton 1962, Blagg 1979, Berg et al 1981, Berney et al 1981, Heath 1983).

Few studies have made it a special concern to evaluate the social class variable though such information is often reported as part of the description of the sample. In one helpful study the workers solicited cases from all socioeconomic groups by letters to schools, GP's, clinics etc in Louisville (Hampe et al 1973). They point out that their resulting sample consisted of fewer blacks and catholics and fewer lower and middle socioeconomic status children. However they conclude that, even if not representative of the general population, their sample of school phobics does fairly represent the population of school phobic children whose parents seek help.

An inevitable problem emerges because the sample sizes in this research are generally low. A breakdown by age, sex, and social class tends to produce unhelpfully small samples in some of the individual cells. If one adds the possibility that the influence of social class may vary depending upon sub-classification used then the problem is all the more acute (Baker and Wills 1978).

It is clear that discussions of social class raise highly pertinent methodological issues. Attainment, family size, greater maternal age, and fewer early separations - all of which have been implicated in the school phobia literature -are in themselves independently linked to occupational status (Galloway 1980). It is thus possible that higher socioeconomic status may be producing the variance normally attributed to school phobia or that the classification as school phobic may in itself be the result of socio-economic status in the sense that the same presenting pattern might have been labelled truancy in groups with lower status.

In the one paper that examined this issue Tennent (1969) found that 8% of boys in the Care of the Local Authority for persistent non-attendance have previously unrecognized phobic type characterisitcs.

In may be instructive to embed the findings on social class and school phobia in the background of more general research on anxiety and social class. It is interesting to note that social class in itself is seldom cited as a cause of concern by the children themselves (Pinter and Lev 1940).

Once again contradictory findings are common. Anxiety in school was found to be little related to social class (Sarason et al 1960) but other equally thorough work examining the issue of fears and social class have reported significant positive relationships between the type and frequency of fears and social class (Angelino et al 1956, Dunn 1968). Sex differences by social class have emerged as important in some work (Shepherd et al 1971).

Finally to add a broader cross-cultural dimension to the debate Cattell (1966) comments that as far as can be generalized from the evidence of ten countries that it would seem that higher anxiety occurs with lower general economic level.

By way of summary then it may be said that the literature on social class suggests that, though potentially a very important variable, in practice it has furnished the reader with an unclear and at times contradictory picture.

While it would be fair to say that social class has a well established association with truancy the situation with regard to school phobia remains far from clear with a variety of biasing influences distorting the findings. In a very general sense the wider the geographical area covered and the larger the sample the more likely it is that social class will be seen to be distributed as in the normal population.

(b) Family size

Family size is mentioned much less frequently in the literature on school phobia than one might suppose from the comments on the social class variable. Some reviewers do not mention it at all (Frick 1964, Kelly 1973, Gordon and Young 1976).

The situation is very different with regard to truants where the likelihood of coming from larger families is well attested. May (1975) found that 38% of his teacher defined truants came from families of 5+ as compared to 18% of his non-truant controls while Tibbenham (1977) links truancy strongly to overcrowding finding this to be so independently of social class. There is general evidence of a decrease in attendance as family size increases (Brooks et al 1962, Galloway 1981).

Proportionately more workers have found mean family size for their school phobic groups to be lower when the comparison has been with truants (Hersov 1960, Torma and Halsti 1975, Blagg 1979). Others have found the phobics family size to be smaller than 'other patient' groups (Berg et al 1972). Prevailingly school phobics have been found to come from families with fewer than 3 children (Chazan 1962, Talbot 1957) though some workers report that there are no differences (Smith 1970). The notion that sub-classification may be important is highlighted by Baker and Wills (1978).

(3) THE INDIVIDUAL CHILD

We now turn to the literature as it relates to the characteristics of the individual child. This is examined under 5 main headings (a) Sex, (b) Age, (c) Ability, (d) Self-Esteem and (e) Anxiety and Other Fears. No special significance is to be attached to the order of presentation here though sex and age differences are discussed first since more than any of the other dimensions these two recur in evaluating the other areas.

(a) Sex

Outside addressing the immediate question of school phobia the importance of analysing data by sex of child has been emphasized by many workers (Eysenck et al 1969, Entwistle et al (1968), Minuchin et al 1969).

Two aspects of sex differences potentially need to be considered. There is the issue of sex differences in the incidence of school related anxieties and the logically separate question of sex differences in the underpinning structure or nature of the condition in boys and girls.

The literature on school phobia in general comments more on incidence figures than on specific differences between the sexes.

Four groups of workers have adopted the expedient of pooling data from a number of published studies. In the first of these data are combined from an unspecified number of previous reports with the numbers involved being between 150 and 200 school phobic subjects. About equal numbers of boys and girls were found (Levanthal and Sills 1964). A somewhat larger tally taken in the same year and involding some 452 pupils found that boys exceeded girls by only 22 (Frick 1964).

In Britain one worker looked at 28 papers which reported findings by sex of child between the years 1941 and 1966. This produced a total of 254 boys and 221 girls - an excess of boys of only 33 (Clyne 1966). More recently a count based on 17 papers found a total of 260 males and 267 females - this time the small discrepancy favouring the girls (Gordon and Young 1976).

The present writer, while acknowledging the short comings of such a global tally approach, finds it preferable to the possible over-interpretation of information from the (generally) small sample sizes involved in school phobia research.

In this pooling exercise 36 papers which report data by sex of child are reviewed. Only English language papers with 6 or more subjects are included. Where a worker with an interest in school phobia spanning several years has reported only the largest of the samples is included.

Operating within the above constraints the final tally of school phobic subjects reported in these 35 papers is 1275 of whom 659 (52%) are boys and 616 (48%) are girls. The average sample size is 36 and the range from 7 to 100. Of this total number of papers 19 reported more boys than girls: 14 reported more girls than boys and 2 reported equal numbers.

It is instructive to look separately at the British and American studies. The average sample size of the 17 British studies is 46 (range 7 to 100) and the average sample size of the 18 American studies is 27 (range 7 to 57).

The British studies produced a total of 785 school phobics of whom 414 are boys and 371 are girls. It is the British work that accounts for all of the (slight) over representation of males. The 18 American papers total to 490 school phobics with equal numbers of boys and girls. There is a tendency for the children in the American studies to be somewhat younger (See section on age differences.

The results of this analysis are presented in Table (1). The papers are presented in alphabeticl sequence. Date of paper, country of origin, total number, and number of girls and boys are reported in separate columns.

Table (1) Alphabetical list of papers by sex of child

AUTHOR	DATE	ORIGIN	TOTAL	BOYS	GIRLS
Adams	1966	USA	21	7	14
Agras	1959	USA	7	4	3
Baker and Wills	1978	GB	99	58	41
Berg et al	1969	GB	29	14	15
Berg	1980	GB	100	53	47
Berney et al	1981	GB	46	19	27
Blagg	1979	GB	70	37	33
Bonnard	1955	USA	7	5	2
Clyne	1966	GB	55	26	29
Coolidge et al	1957	USA	27	11	16
Davidson	1960	GB	30	16	14
Eisenberg	1958	USA	26	16	10
Gittelman-Klein	1971	USA	35	16	19
Glazer	1959	GB	38	20	18
Goldberg	1953	USA	17	11	6
Hampe et al	1973	USA	57	34	23
Heath	1983	GB	41	26	15
Hersov	1960	GB	50	31	19
Hersov	1979	GB	60	28	32
Jacobsen	1948	USA	30	12	18
Johnson et al	1941	USA	8	4	4
Kennedy	1965	USA	50	25	25

Table (1) continued

AUTHOR	DATE	ORIGIN	TOTAL	BOYS	GIRLS
Leton	1962	USA	12	5	7
Milman	1961	USA	20	6	14
Model and Shepherd	1958	GB	17	11	6
Nursden	1958	GB	25	15	10
Rabiner and Klein	1969	USA	34	19	15
Rodriguez et al	1959	USA	41	27	14
Smith	1970	GB	63	33	30
Talbot	1957	USA	24	8	16
Van Houten	1948	USA	12	2	10
Waldfogel et al	1956	USA	53	28	25
Warren	1948	GB	8	5	3
Warnecke	1964	GB	47	17	30
Weiss and Cain	1964	USA	16	10	6

The above papers have been restricted to those from the United States and Great Britain. Two interesting Japanese papers reporting very large samples have consequently been omitted. These papers are however worthy of some comment as they relate to the issue of sex differences.

The first and smaller of these reports a sample of 154 school phobic boys and 67 school phobic girls. This represents a ratio of 2.3 to 1 and is not only higher than British and American ratios where reported but the absolute numbers of phobics is higher than usual - though the period of data collection is not specified in the English language summary (Fukuma 1978).

A dramatically larger series of n=848 school phobics was reported by Wakabayashi (1982). He points out that these were the children seen at an out patient department in a University Hospital Department between 1957 and 1981. He also indicated a dramatic increase since 1962 which reached a plateau between 1967 and 1971. The ratio of males to females is 1.46 to 1 but since 1972 has become almost even. While these findings are closer to the present evidence from a Western perspective it would be hazardous to consider them as the same. The very large sample sizes may mean that different criteria were being used.

Other workers have introduced the possibility that there may be a difference in distribution of school phobics by sex when sub-types of phobic are taken into consideration. Berg et al (1969) who make a distinction between 'Acute' and 'Chronic' cases found more of their 'Acute' group to be boys. Similarly Baker and Wills (1978) also using the acute/chronic classification report more boys than girls in the acute group.

Some workers have intimated that there may be differences in adult outcome for girls and boys who suffer from school phobia as children. Some report a better prognosis for girls (Milman 1961) while the opposite conclusion is reached by Tyrer and Tyrer (1974).

More interestingly from the point of view of the present study is the possibility that, in early adolescence at least, school phobia may be a different phenomenon for boys and girls (Heath 1983). He found that male phobics had significantly lower self esteem scores than their peers and than school phobic girls. He subsequently managed to establish that in the girls in his sample academic self image is not based on 'reality' in so far as it is unrelated to measures of attainment or ability whereas the academic self-esteem of both norm and phobic boys were related to these objective measures.

Other workers too have reported such differences as boys being more timid and socially withdrawn (Hersov 1960), and immature, passive, unadventurous and with few friends (Davidson 1960).

It is perspective enhancing to look briefly at some research not directly with school phobics but none the less related to anxiety in boys and girls. Generally girls are reported as more prone to fears and anxieties than boys (Sarason et al 1960, Jersild et al 1941) though one has to be alert to the possibility of an age by sex interaction (Dunn 1968).

Girls between 8 and 13 years have been found to express more school anxiety than boys but by mid adolescence boys manifest as much anxiety as girls (Maccoby and Jacklin 1974). Furthemore a detailed study of anxiety, motivation and ability found that, for girls of primary age, there are close links among these variables but for boys the picture is less consistent (Wade 1981a).

However in a large scale, carefully analysed study it was found that worries regarding school occur in boys and girls and are among the commonest worries (Angelino et al 1956).

In summary it may be said that, while individual studies may report different incidence rates of school phobia by sex of child, the direction of the reported differences is not constant and when figures are summed over a number of studies the proportions tend to become more even.

There appears to be some evidence that consideration of sex alone as a variable could potentially be misleading without simultaneous reference to a variety of other psychologically relevant dimensions such as social class, self-esteem, age of child etc. On current evidence, however, it would seem prudent for researchers to examine their data for sex differences - sometimes of a very subtle nature.

(b) Age

The term/diagnosis of school phobia has been used by various clinicians and researchers across a very wide age range of subject. School phobics have been identified as young as 2 years (Sperling 1961) and as old as 17 years (Croghan 1981).

It would probably be fair to say that only workers operating from the theoretical stance of a Separation Anxiety model could diagnose school phobia in very young children (Borstein 1949, Sperling 1961, Luchini 1978, Eisenberg 1958b). Having said that, a small number are prepared to allow the idea of 'work phobia' to be a form of separation anxiety analogous to school phobia (Pittman et al 1968) while Monsour (1961) describes cases of school phobia in teachers.

In this section 34 papers are chosen for review. These papers were selected since they cover the normal age range of compulsory schooling ie 5 to 16 years in Great Britain and between 6 and 7 years and 16 years in the United States.

However, even within this age frame, it has been asserted that the symptom of school phobia cannot be evaluated apart from chronological age (Milman 1961). This, perhaps, should not be seen as surprising given the very considerable span of physical and psychological development entailed within this span. Some workers indeed restrict comment to pre-pubertal children to minimize the confusion since they feel that after adolescence school phobia is a heterogeneous grouping with more severe problems (Waldron et al 1975).

Table (2) reports the total number of children and where available, the age range, and whether peaks are reported at above or below 12 years. This cut off was chosen basically to separate first year secondary and above from (in British terms) the primary age range.

It is interesting to note that whilst almost all the British papers either quote age range or furnish enough information for this to be extracted, only one American study provides an average age for their sample. Of the 17 British studies 10 (59%) quoted averages. Age peaks within the secondary age range are reported by 11 (65%) of the British workers and by only 3 (16%) of the American papers. Fewer British papers report an age peak in the 'below 12 years' age group. Indeed only Clyne (1966) and Warnecke (1964) do so though some eg Baker and Wills (1978) report a smaller additional peak at around 8 years. It may be that some workers have not evaluated age peaks believing this dimension not to be relevant.

Table (2) Papers by Age, Age Range and Age Peaks

AUTHOR	TOTAL	RANGE	AVERAGE	PEAKS
Adams (1966)	21	6-16	-	-
Agras (1959)	7	6-12	8.5	-
Baker and Wills (1978)	99	5-14	11.0	11+
Berg et al (1969)	29	10-15	12.8	11+
Berg (1980)	100	8-15	13.0	11+
Berney et al (1981)	46	9-15	-	11+
Blagg (1979)	70	9-16	-	11+
Clyne (1966)	55	5-16	7.7	11-
Coolidge et al (1957)	27	5-12	-	11-
Davidson (1960)	30	6-16	-	11+
Eisenberg (1958)	26	6-18	-	-
Gittelman-Klein (1971)	35	6-14	-	-
Glazer (1959)	38	6-13	-	-
Goldberg (1953)	17	5-14	-	11+
Hampe et al (1973)	57	6-15	-	-

Table (2) continued:

AUTHOR	TOTAL	RANGE	AVERAGE	PEAKS
Heath (1983)	41	10-16	13.3	11+
Hersov (1960)	50	6-16	11.7	11+
Hersov (1979)	60	6-16	11.7	11+
Jacobsen (1948)	30	5-13	-	-
Johnson et al (1941)	8	6-14	-	-
Kennedy (1965)	50	4-16	-	-
Leton (1962)	12	6-18	-	-
Milman (1961)	20	9-17	-	11+
Model and Shepherd (1958)	17	8-14	-	-
Nursden (1958)	25	-	-	11+
Rabiner and Klein (1969)	34	7-14	-	-
Rodriguez et al (1959)	41	5-13	-	11-
Smith (1970)	63	5-16	-	11+
Talbot (1957)	24	5-15	-	-
Van Houten (1948)	12	6-15	-	-
Waldfogel et al (1956)	53	5-14	-	-
Warren (1948)	8	9-14	-	-
Warnecke (1964)	47	5-11	-	-
Weiss and Cain (1964)	16	8-16	-	11+

Such tables, while a useful way of summarizing the situation may tend to mask important features. A number of writers have reported age to be a significant variable. Basically age appears to have been considered in two ways. Firstly some workers report differences between their phobic samples and other groups of normal controls or truants (Hersov 1960, Blagg 1979).

Secondly and more generally age is addressed in terms of whether there are age peaks in the population of school phobics. A minority of workers report the major peak age-range for school phobia to be with the younger children - somewhere between 5 and 9 years (Goldberg 1953, Glazer 1959, Waldfogel et al 1956).

Much more commonly, however, is the finding that the early secondary school years are the most vulnerable period. This is especially true in the British research sphere where by far the most commonly quoted age range is between 11 and 13 years (Hersov 1960, Blagg 1979, Heath 1983, Baker and Wills 1978, Berg et al 1969, Davidson 1960, Nursden 1958, Morgan 1959, Levanthal and Sills 1964).

A number of writers have indicated that, while there may be peaks in particular age ranges, the distribution is actually bi-modal with an early lesser peak between 5 and 7 or 8 years and a later more substantial peak at 11 to 13 years (Smith 1970, Sangster 1971, Baker and Wills 1978, Wakabayashi 1982).

It is also worth noting that Hersov (1977) suggests that there may actually be three peaks - the first occurring shortly after starting school, the second at 11+ years and the third at 14+ years which is likely to be associated with more severe disorder such as depression. Hersov's tri-partite distinction seems to provide a means of reconciling some of the conflicting findings and is in good accord with clinical experience.

The situation may prove to be more complex than the above would suggest. It is possible that there are important age differences in terms of various sub-classifications of school phobia. Berg et al (1969) report that their 'Acute' group was older than their 'Chronic' group, while Coolidge et al (1956) found that their younger school phobics tended to be female and to be more neurotic.

That the issue of age is not merely an academic question can be seen in the finding that age of onset of school phobia is of prognostic significance. One follow up study reports that 89% of those with a phobic onset below the age of 11 years were attending school regularly whereas, of those with an onset over the age of 11, only 36% were so doing (Rodriguez et al 1959). Similarly Sangster (1971) reports that his 11-13 peak had a worse prognosis than those with an earlier peak.

The consensus is well summed up by Shapiro and Jegede (1973) who state that "as we ascend into adolescence the pathological significance of school phobia increases".

Outside the literature expressly addressing the school phobic issue, a number of writers have commented on the changing pattern of anxiety with increasing age. In general the move appears to be from more concrete fears to rather more abstract and social fears (Jersild et al 1933, Winker 1949, Angelino et al 1965, Bauer 1980).

Negative feelings in regard to school are known to increase with age (Raven 1979, Dunn 1968, Mitchell and Shepherd 1967). There is also an age trend approximately between the ages of 11 and 13 years in the direction of loss of self esteem (Ellerman 1980).

In summary the existing literature on school phobia provides examples of some work showing age peaks with 5 to 8 year olds: others with 11 to 13 year olds while yet others argue for a bi-modal distribution. Sample sizes tend overall to be small; rather too small in many cases properly to identify peaks.

Much of this work adopts a clinical perspective and the investigative focus is sometimes rather narrowed by particular theoretical or treatment approaches. Where sample sizes are larger and statistical evaluation is added to clinical judgement the bi-modal distribution seems better to account for most of the figures. There remains the possibility that Hersov's consideration of a tripartite distribution may provide the most satisfactory overall model.

(c) Ability

It would seem likely that ability could have a considerable impact on a child's success in, and enjoyment of, school. When children become anxious regarding school or refuse to attend the question arises as to whether they are able to cope with the level of expectation imposed on them. There is, indeed, an historical tradition in seeing an association between attendance difficulties and lower than average ability (Burt 1925, Dayton 1928).

Much of the early work with school phobics however report that these children are of at least average ability. Indeed the prevailing comment is that they are of average to superior ability (Johnson et al 1941, Van Houten 1948, Borstein 1949, Estes et al 1958, Sperling 1967, Eisenberg 1958 a & b, Model and Shepherd 1958, Davidson 1960, Baker and Wills 1978, Blagg 1979, Heath 1983).

In their exercise of pooling data from a number of studies amounting to between 150-200 subjects, Levanthal and Sills (1964) comment that the IQ's are average or above. However a smaller number of workers have reported that at least some of their samples had sub-groups who were below average in ability (Nursten 1958, Rodriguez et al 1959, Chazan 1962). Yet other researchers have noted that ability is either normally distributed or close to the normal distribution (Hersov 1960, Warnecke 1964, Smith 1970, Nicols and Berg 1970). In reviewing 9 studies Gordon and Young (1976) also report a normal ability spread.

It appears that only one study set out specifically to investigate the question of ability (Hampe et al 1973). These workers point out that school phobics are usually considered as being of above average ability but add that the data are not usually collected systematically with sample sizes either being small or based on an accumulation of clinic cases. They conclude from their work that their data are virtually identical with the standardization data from the Wechsler Scales - the ability measure used.

Part of the explanation of the divergence of views may relate to two possibilities (a) the large number of studies employing subjective estimates of ability and (b) some constructions or definitions of school phobia tending to discard subjects of below average ability.

It is likely that (a) will have been influenced by verbal skills. Such skills are likely to be differentially distributed in terms of social class and consequently are more likely to show up within the 'private practice' emphasis in much of the American work. In this context it is possible that children with better developed skills in non-verbal areas will feel frustrated and devalued. There is some evidence that children from homes rated as over anxious tended to do poorly on the Wechsler Intelligence Scale for Children (Performance Scale) - one of the most commonly used instruments in the school phobia research (Kent and Davis 1957).

With regard to (b) some workers specifically exclude pupils with less than average ability (Talbot 1957, Tonna and Halsti 1975). The bias introduced by such an approach is considerable. It potentially amplifies social class differences and leads to a whole group of pupils with anxieties regarding school attendance being located elsewhere in the diagnostic spectrum. Hampe et al (1973) strongly indicate that 'a school mental health worker's index of suspicion of school phobia should not vary as a function of the intelligence of the child'

There are, of course, other possibilities to account for some of the observed differences. A link has been mooted between high ability and the reporting of fears (Boston 1939). He found that 61% of children in the superior range of ability reported fears as opposed to 36% of children with more average levels of ability. Boston accounted for this in terms of high ability sensitizing to danger. Intriguing though the idea is, this work is based on an analysis of case records and suffers from the additional weakness that information on fears was not systematically elicited. It may simply be that able children more readily report fears than experience them in greater number.

Children from demanding homes (in terms of discipline) have been found to have higher ability scores but also to go to pieces more readily when presented with unfamiliar tasks (Kent and Davis 1957). Other work suggests that the links between anxiety motivation and ability may be stronger and more clear cut for girls (Wade 1981).

Ability assessments based on judgements as opposed to formal measures can clearly influence expectations which may transmit to the pupils as pressure to do better. Unless these judgements correspond reasonably to the pupil's actual learning aptitude this pressure will be unfair and burdensome with the capacity to generate or to amplify anxieties.

One worker has made the revealing observation that the teachers of the majority of school phobics in his sample over estimated their ability - assessed by the Wechsler Scales- (Heath 1983). Others too have noted the fact that divergent views held by class teachers and parents regarding ability can hinder progress (Ojanen 1980).

That the impact or effect of this issue is not limited to the immediate school situation is reflected in a follow up study of former school phobics into the work situation. It was found that a significant number were in jobs not commensurate with their ability (Baker and Wills 1978). Similarly Coolidge et al (1964) managed to trace 49 of their original sample of 66 school phobics. They found that while 12% were above expectation in achievements a much heftier 43% were below expectation. There would thus appear to be a longer term value in being aware of the importance of ability as a factor when dealing with pupils with significant anxieties as regards school. The possibility that self-esteem is implicated is explored more fully in the next section.

Perhaps as important as the pupils measured ability or its estimated variations is the pupil's concept of his own standing with his fellows (Clyne 1966). Thus, even for able youngsters who doubt their own ability, there can be an academically crippling degree of concern which impairs performance (Weiner 1979). In an interesting observational study of transfer to secondary school it was noted that children soon began classifying each other as 'thick' or 'brainy' and within 3 weeks an influential pupil hierarchy of academic ability has been established (Measor and Woods 1984).

In summary the numerical weight of papers reporting on the ability of school phobics points in the direction of the school phobics prevailingly being regarded as average or above average in ability. However important issues of referral and diagnostic bias have been raised and complex potential interactions of ability with anxiety, social class, self esteem etc make it prudent for clinicians and researchers to bear these other factors very carefully in mind.

In general the evidence points to the likelihood that the bigger the sample and the more valid the means of assessing ability the more likely it is that the intelligence of school phobic pupils will be seen to be distributed much as in the general population.

(d) Self Esteem

Self esteem has been accorded its own representation in this section primarily for the reason that it has attracted research in its own right and not, as has often been the case with various personality attributes, been assessed only as an adjunct to other features.

The notion of self-esteem, though readily enough understood and easy to use at an intuitive level, has in practice been elusive of definition protected as it is by a measurement minefield and camouflaged by conceptual confusion. Perhaps the use of a single term to cover such a large territory in itself is part of the difficulty. These problems, important and complex though they may be in work with adults, assume an even more daunting mantle when the requirement to think of them from a developmental perspecive is added.

Within the domain of school phobia research the influence of self-esteem as a variable has its most quoted incarnation in the work of Levanthal and Sills (1964) who promote it to a major explanatory status. They state that,

> "regardless of other features, what is relevant to the school refusal behaviour is that these children commonly overvalue themselves and their achievements and then try to hold onto their unrealistic self image. When this is threatened in the school situation they suffer and retreat....".

A similar position has been adopted by Radin (1967) who argues that school phobia involves more complex mechanisms than are ordinarily encountered in phobias and that these relate to the special kind of nurturance received at home and not available at school where reward and punishment are based upon realistic performance.

Perhaps the most logical difficulty with these positions is thay they do not adequately cater for the well extablished age peak for the occurrence of school phobia between 11 and 13 years. It is difficult to believe that there are no reality based challenges to these pupils in the school system before this time. It is interesting to note that the argument in terms of age peaks was put forward by Levanthal and Sills against the separation anxiety model which they were challenging.

Despite these objections a number of workers besides the above have found the notion of unrealistically high self-esteem to be of value (Bonnard 1955, Coolidge et al 1960, Waldron et al 1975). One group of workers expressed this approach succinctly when they said that the parents of the school phobics 'become an all purpose anaesthetic sparing the child the pains of every day experience' (Pittman et al 1968).

However others, who have adopted a more rigorous approach to measurement, have failed to find higher self-esteem and indeed produce evidence that the self-esteem of school phobics is low (Nicols and Berg 1970, Heath 1983).

The self-esteem hypothesis has received its most thorough evaluation in the work of Heath (1983) who very carefully examines the constructs and definitions inherent in the Levanthal and Sills conceptualization and concludes that self concept is not a unitary notion. He goes on to probe the view of self concept as an attitude to self and supports the idea that both cognitive and affective components must be investigated for a full understanding. He highlights the evidence that the affective component is notably more powerful that the cognitive component in affecting behaviour.

Having said that Heath's work shares a quite basic methodological difficulty with much of the published work on self-esteem (and indeed other measures) as they pertain to school phobia. There is a strong theoretical possibility that the blow to the child's self-esteem by being unable to attend school, together with the substantial professional and official attention it attracts actually functions to lower his or her self esteem. By the time the clinician or researcher is able to evaluate self-esteem the picture may be very distorted. It is interesting to note, in support of this, that the self esteem of chronic school phobics is lower than acute school phobics (Nicols and Berg 1970).

In principle one could deal with these difficulties by a prospective study with a sufficiently large sample and building in some self-esteem measures.

Any child who subsequently developed a school phobic reaction could be reassessed on these measures and have his pre and post phobia self-esteem scores compared.

It may be instructive to look briefly at other evidence on the self esteem of children in the age group most affected by school phobia - namely the 11 to 13 year olds. It has been argued that there is developmental evidence that self-concept disruption (and depressive reactions) most frequently occur during early adolescence (Rosenberg 1979). If this is so then it would be very surprising if school phobic children managed to maintain average self esteem. Furthermore Ellerman (1980) has reported that self-esteem progressively reduces from around age 8 years to at least age 13 years. He speculates that this may be because children gain more accurate pictures of themselves as they really are and also gain greater modesty about themselves as they experience the tempering effects of a number of socializing influences - a view with which Levanthal and Sills would be in sympathy.

Some workers have found an inverse relationship between anxiety and self-evaluation [r=-.67] (Coopersmith 1967). He also found that children high on self-esteem were not so sensitive to criticism and tend to be more self assured. This is in line with other work which suggests that once people view themselves as poor social performers they are more likely to recall information that is unfavourable about themselves (Markus 1980).

This is in keeping with the link between 'controllability' of events and self-esteem postulated by Seligman (1975) and Bandura (1977) who produces evidence that fear reactions can be mediated by perceived self efficiency.

The very broad scope and wide influence which can be attributed to self concept has been well summarized in the work of Chapman et al (1984). These workers report that research effort:

> "strongly suggests that self-perceptions are important mediational influences which define for individuals the nature of their relationships with other people, the types of behaviours and the tasks on which they will engage, the states of tension they will experience...."

Thus, while acknowledging the complexity of the measurement and definitional issues, it would probably be fair to summarize the present situation by saying that the trend of findings is strongly towards school phobics either being close to average or, more commonly, below various comparison groups in terms of self-esteem either clinically assessed or measured on specially constructed instruments.

(e) Anxiety and Other Fears

It is probably fair to say that all conceptualizations and definitions of school phobia have anxiety at least as a component but more usually as a central feature (Frick 1964, Waldfogel et al 1956, Want 1983).

What tends to be at dispute is not the existence of the anxiety but it's source. The question becomes whether the anxiety is generated by a genuine fear of school or some aspect of the school situation or a fear of separating from home and mother. It is questions such as these which inform the theoretical discussion on school phobia and the answers to which create the central divides in the published literature.

Despite the implicit agreement on the presence of anxiety it is unusual for a discussion on the nature and meaning of the concept of anxiety to accompany statements regarding it's presence. It is treated as though an uncontentious shared meaning can be assumed.

It is proposed here to examine the notion of anxiety then to comment on those papers which suggest that school phobic children have other fears and to provide an overview of the links between anxiety and it s effects. Anxiety is relatively new in the psychological literature. It was not not even listed in the indexes of psychological books before the late 1930's outside the work of psychoanalytic writers (May 1950).

An examination of the attempts to define anxiety from both the psychoanalytic and behavioural viewpoints indicates how strong are the similarities rather than the differences. Freud (1949) specifies 3 criteria for anxiety: (a) a specific unpleasurable quality (b) efferent or discharge phenomena and (c) the perception of these.

Freud's view of anxiety is thus that it is unpleasant, has physiological concomitants and is a conscious experience. There is nothing that would be regarded as specially contentious in this description. It is in the elaboration of these views into a theory of the aetiology of phobias that problems emerge. Freud regards the prototype of all anxiety to be the complex of sensory, motor and physiological experiences which flood upon the immature nervous system of the foetus at birth. Gradually this first reaction becomes more focussed. The infant learns that the appearance and disappearance of feelings of 'unpleasure' are associated with the appearance and disappearance of certain objects ie people in his world. Thus the anxiety becomes displaced from the danger situation of helplessness to the determinant of the danger - separation.

On the learning theory side Rachman (1978) also argues for a three component theory of anxiety comprised of: (a) The subjective experience of apprehension (b) associated psychophysiological changes and (c) attempts to avoid or escape from certain situations.

Rachman (1978) further argues that the complexity of the relations between the emergence and the decline of a fear can be seen from the fact that repeated exposures to the fear evoking situation or object increases the fear (sensitization) at some times and at other times decreases it (habituation). This view of the complexity of the situation and the need for additional explanatory mechanisms to account for some of its features is also highlighted by Eysenck (1977).

A potentially helpful distinction is frequently made between anxiety conceived as a 'state' and anxiety as a 'trait'. A state has been defined as 'a complex reaction or response - the transitory state of the organism that varies in intensity and fluctuates over time' while a trait has been defined as a 'stable individual difference - it is a unitary, relatively permanent personality characteristic' (Spielberger 1966).

The above dichotomy is also important in the work of Cattell who regards the distinction between 'reality based situational' and 'characterological' anxiety as important (Cattell and Scheier 1961). The words 'bound' and 'free' respectively are also sometimes used. Rachman (1978) too subscribes to this distinction preferring the labels 'focal' and 'diffuse' where Cattell uses 'bound' and 'free'. The distinction in the school phobia literature between 'Acute' and 'Chronic' presentations appears similar to this (Berg et al 1969).

In practice, however, the above discrimination between 'Acute' and 'Chronic' groups rests entirely on whether or not the child had attended school in a trouble free way for the 3 years prior to the onset of the phobia. None the less it is interesting to speculate on a connection. Certainly Baker and Wills (1978) in their study of school phobics found that 83% of their Chronic cases had been anxious before the onset of the school phobia whereas in their Acute group the proportion is 59%.

Similarly with the distinction between 'Neurotic' and 'Characterological' phobics the latter, who are regarded as more disturbed and resistant to treatment, are higher on a trait of general anxiety which makes their situation worse and complicates the treatment process (Coolidge et al 1957). It has been suggested that with some children there is a history of sensitivity to change and an anxiety proneness which renders them susceptible to these patterns of responding (Eisenberg 1958b).

It would not be wholly unreasonable to suggest that children who have a characteristic anxiety trait are less likely to find the occurrence of anxiety 'ego alien' than those who are in a specific anxiety state. The possibility that the trait/state distinction is important with school phobics is in principle a testable hypothesis. Ideally information would be gathered from parents and teachers as well as direct measures with the children. If the distinction were validated it would account for some of the research findings and have treatment implications.

One must however be alert to the possibility of variables such as age, social class and sex affecting outcome and interpretations. It is also worth noting that a distinction is sometimes held to exist between anxiety and fear (Sullivan 1953, Jersild 1954). However, it has been pointed out that careful personality studies show that the younger the child the more difficult it is to maintain the distinction between fear and anxiety (Erickson 1950). Furthermore the distinction is in practice very difficult to operationalize (Barrios et al 1981).

It may be that while the fear/anxiety dichotomy is unhelpful in this context that other ways of conceptualizing the notion would be more likely to yield helpful results. One group of workers investigated the component structure of anxiety in more depth. They comment that when Mandler and Sarason's Test Anxiety Scale is factor analysed it yields two relevant factors (Liebert and Morris 1967).

These factors are labelled Worry and Emotionality. Worry is a cognitive factor which is associated with a lack of confidence and relates to concern about outcome and is consciously experienced as something akin to dread. On the other hand Emotionality encompasses autonomic arousal involving bodily reactions or emotional feelings such as tenseness or nervousness. Where success is expected worry is at a minimum. Indices of anxiety which are autonomic should be highest when one's own performance is least certain.

This is in keeping with a model of risk taking in which anxiety is assumed to be an indication of the desire to avoid failure (Atkinson and Feather 1966). It has been found that worry as a measurable variable is consistently more related to academic work and ability in a negative direction than is emotionality (Liebert and Morris 1967).

When the Worry/Emotionality distinction was applied in a study of developmental and sex differences in school related anxiety no significant interaction was found between sex and grade level. There were however significant decrements with age for worry but not for emotionality. There were also significant sex differences for emotionality but not for worry - the girls scoring significantly higher than the boys on the emotionality scale (Morris et al 1976).

Though the Worry/Emotionality distinction does seem a helpful clarification the area continues to present difficulties including low correlations between self report and external ratings and behavioural observations (Rachman 1978).

The need for continued caution is stressed by Marks (1977) who points out that none of the theoretical models proposed to explain the acquistion or maintenance of fear and anxiety is sufficiently comprehensive to provide a full understanding of the factors; cultural, inter-personal and constitutional which may be relevant.

The number of papers on school phobia in relation to other phobias is in the ratio of 25:1. This is perhaps surprising - the more so when one considers that a number of writers have specified a connection between school phobia and other fears.

It has been said of the school phobic child that 'typically he has other fears' (Eisenberg 1958a), and that 'other fears frequently accompany school phobia' (Bakwin 1965). Van Houten (1948) agrees and regards it as 'expected' that school phobics will have 'many' other fears while Frick (1964) in her review talks of a 'wide range' of other fears and Talbot (1957) claims that 'with very few exceptions these children have other phobias'.

Some seek to be more specific in regard to which other fears will be present with the dark and animals featuring prominently (Talbot 1957, Waldfogel et al 1956, Millar 1961, Agras 1959, Bowlby 1973). However no study to date appears to have concerned itself specifically with the investigation of the actual incidence of other fears among school phobics nor to be systematic in relating particular fears to the school phobic childs situation. Indeed the literature on school phobia and that on the other fears of childhood are largely exclusive of one another with little cross referencing or sharing of research strategies.

Phobias have been called the 'normal neurosis of childhood' (Freud 1949) and Goldenberg and Goldenberg (1970) regard school phobia as its most virulent form. Young children have been seen as 'physiologically phobic' because of their proneness to primitive reactions and symbolic thinking (Krakowski and Santora (1962) while others, in broad agreement, say that childhood phobias are so common that mild, transient phobic reactions are to be regarded as a normal part of early development (Kessler 1966).

As early as 1928 Dayton commented that 'In reality we know little of the mental sufferings of childhood', a view echoed in more recent times by Nisbet and Entwistle (1969) whose study of the realities of transfer to secondary school led them to conclude that 'we must appreciate that childrens' experiences may well be more terrifying than they will admit to their mother or in an essay'.

Examination of data from large scale epidemiological work is likely to be helpful. The prevalence rates for 'serious' fears in the Isle of Wight survey of 10-11 year old was only 7 per 1000 with animals, darkness and disease phobias being most common. In this study only 3 children were found to have clinically significant school refusal and a further 4 had mild fears connected with school (Rutter et al 1970). However at least double the rate of clear cut school refusal was found when the same population was re-examined at age 14 years (Yule 1979).

The Buckinghamshire Child Behaviour and Mental Health Study (Shepherd et al 1971) found that fear of the dark tends to fall with age and to be free of sex differences till 13 years when more girls than boys become prone. Extreme fear of animals was found in 4% of girls and 2% of boys up to 9 years when the sex difference disappears only to reappear at age 15 years when 15% of girls and no boys are said to be frightened of animals.

Extreme fear of meeting people was reported in 12 per 1000 girls and in 9 per 1000 boys. A little fear or shyness was however very common being found in nearly half the pupils. Shyness of other children was the least common of fears - being reported at extreme intensity for only 19 girls (a rate of 6 per 1000) and 17 boys (a rate of 5 per 1000). No sex differences were found here though it was noted that boys tend to develop these fears only after 9 years.

Children actively disliking school was reported by the parents of 6% of boys and 3% of girls. This proportion remained relatively constant till 12 years when it began to rise slowly for both sexes. The proportion enthusiastic about school gradually decreases.

These studies are important in providing evidence regarding childrens' fears from a non clinical population and with sample sizes sufficiently large for confidence to be maintained in the findings. In the absence of such data it is impossible to make valid judgements about particular findings in a referred group.

One must remember that the child is relatively little, weak and vulnerable in a world in which many situations and objects really could do him or her harm (English and Pearson 1945). In order to make sense of all the possibilities there have been various attempts to classify fears. These attempts have tended to take either a clinical or a statistical direction.

The work of Marks (1969) represents an example of a clinical classification. He feels that there are four major categories: (1) Social phobias (2) Specific animals and insect phobias (3) Illness phobia and (4) Agoraphobia. The social phobias, which are those of most interest here, are said to be evenly distributed by sex and to have their most common onset between 15 and 30 years.

Though attempts to make such a breakdown on the basis of clinical experience are of interest, in practice it is difficult to know which fears may be conceptually related to one another. In order to help answer this question Dixon et al (1957) factor analysed data on a wide variety of fears and phobias. They found a general factor of 'fearfulness' and a second factor which they felt subsumed two broad categories of phobias - those relating to fears of separation and those relating to fears of injury, hurt or pain. These workers were however looking at the situation as it obtains with adults. It would perhaps be unwise to assume that the nature of fears among children mirror those of the adult world.

Specific investigations of the factor structure of childrens' fears have been undertaken. Parent ratings of child fears is a regrettably common approach in this field. In one study three factors were extracted; (a) physical injury, (b) natural disaster, and (c) fears of a more social and personal nature (Miller et al 1972).

Though anxiety is the common denominator in all of this work there has been a marked tendency to ignore the theoretical links between the presence of anxiety and the actual mechanisms which produce the inability to attend school. The usual assumption appears to be of a simple additive model which, at some stage, reaches a critical point and refusal to attend follows. There is indeed a certain face validity to this. Difficulties relate to determining why in some children the anxiety becomes crippling while remaining manageable in others.

While it is doubtless true that no simple or straight forward explanation is likely to emerge it may be instructive to review some of the notions relating to the consequences of anxiety - besides its subjective unpleasantness. What is here being sought is some form of definable/measurable sequelae to the anxiety and why it has these consequences for the anxious child in school.

The Childrens' Form of the Manifest Anxiety Scale seeks to tap anxiety via more neutral and disguised items. Use of this has revealed statistically significant interaction between anxiety and task difficulty.

This interaction is felt to be due to the tendency of the high anxiety pupils to perform better on easy components and at a lower level on the more difficult items (Casteneda et al 1956). Though these workers did not specifically control for ability they felt that the differences here were a consequence of the anxiety.

If it can be accepted that there is an effect here which is independent of ability within the normal range it may be that Wine (1971) has furnished part of the solution. He has made the suggestion that an attentional mechanism is at the root of the impact of anxiety with the highly anxious child having difficulty focussing on the most relevant aspects of the task. In support of this it has been found that test anxiety is related to performance and off task glancing. High anxiety children seem less able to attend to relevant cues, frequently looking away from the task and not performing so well (Nottelman and Hill 1977). It may well be of course that this is not all due to attentional difficulties since it is feasible that such children may have a higher need to monitor what is going on around them.

An alternative view of the active mechanism was nominated by Mandler and Sarason (1952). They examine coping strategies and identify two main varieties (a) Avoidance ie leaving the situation or stopping attending to it and (b) Approach - which reduces anxiety by task completion.

This model has been used in researches into the relationship of coping strategy to both attainment and behaviour (Wade 1981). In her work she found that 'Approachers' had higher attainment than 'Avoiders'. There was a close link between anxiety, motivation and ability for girls but not so clearly for boys. Additionally she found that 'Avoiders' tended to be more introverted and 'Approachers' more extraverted - an observation of some interest here given the common finding of a more introverted pattern of personality functioning among school phobics (Blagg 1979, Heath 1983).

In her consideration of the Approacher/Avoider dichotomy Wade draws upon Atkinson (1964) whose motivational theory regards all individuals as having both a motive to avoid failure and a motive to achieve success. Performance is therefore seen as the resultant of the approach and avoidance forces. If the strength of the motive to avoid failure equals the strength of the motive to achieve success then good performance is dependent upon the influences of extrinsic incentives.

There is a strong clinical appeal in this model in relation to the observed behaviours of school phobics. Though not concerned with the subject of school phobia Miller (1941) has produced an operational definition of approach/avoidance conflict which is a good fit for many of the descriptions in the school phobia literature.

Basically Miller argues that as the subject gets nearer to the goal the strength of the avoidance increases more rapidly than that of approach. He eventually reaches a point at which the strength of the avoidance equals that of approach when the two gradients cross. At this point he stops.

An example of the use of this approach in work directly concerned with childrens' reactions to school is a study which applies the approach/avoidance paradigm to school anxiety (Dunn 1968). He found age, sex and social class differences - with the pattern being that children become more negative about school as they get older.

Though age differences are nominated as important in work such as this, by and large views on the possible mechanisms for the effects of anxiety have tended to ignore the developmental perspective. There is the implicit notion that each theory would validly apply to any age group. This is a rather large assumption.

It may be that the work of Odier (1956) offers a way forward. He attempts in effect to marry the ideas of Freud to those of Piaget. Basically Odier feels that anxiety exerts a dissociative action on consciousness which causes the more logical thought processes to revert to their original magical or animistic level. He argues that prolonged anxiety in due course produces what he calls the 'syndrome of ego dysfunction'.

This syndrome comprises of three central components (a) Feelings of Helplessness (b) Feelings of Insecurity and (c) Feelings of Self Devaluation. The existence of all three of these reactions will be familiar to students of the school phobia syndrome.

Though these ideas are clearly of considerable interest in themselves they cannot be the whole answer - if only because of the range of unresolved issues which remain even if Odier's thesis is accepted as valid. Among these unanswered questions are the following: How can so many of these children appear to function well in other areas of their lives while being monumentally anxious about school? Why is it that age peaks seem to occur? How do children with other serious phobias manage to attend school and to cope with its demands? Why are there systematically reported sex differences in studies of childrens' fears and anxieties while the sex distribution of school phobia appears normal?

The need to establish and maintain a developmental perspective in regard to such matters has received a more recent statement in the work of Bauer (1980). He puts the argument well when he states:

> "Regardless of content however, fears are products of conceptions of reality created by children from perceptual and mental processes typical of their developmental level and age"
>
> Bauer 1980

Bauer's work clearly suggests that children experience a heightened level of distress on first entry to school but this is dissipated significantly by the age of 8 years. However in the 11 year old group he found that boys seem to experience more emotional conflict. Children of both sexes had an increased fear of failure by age 11 years which proved to have implications for how they viewed their longer term future.

In summary it can be said that, though anxiety is implicitly acknowledged as a fundamental construct in the school phobia literature, it is uncommon for its nature to be explored as opposed to its source. It may be that the distinctions between 'State' and 'Trait' anxiety and between 'Worry' and 'Emotionality' have clarificatory value.

Surprising too is the rarity with which school phobia is seen against the backdrop of other childhood fears. Despite the frequent assertion of a connection no paper seems specifically to have investigataed this issue.

The importance of seeing childhood fears and school phobia within a developmental framework is here stressed and a plea made for more consideration of the possible mechanisms by which the subjectively experienced anxiety transforms into other negative consequences.

The above review of the major aetiological theories and descriptive aspects of school phobia is a testament to the considerable scope of this field and the extensive range of features and dimensions which have been felt to be involved.

Psychodynamic ideas vie with learning theory based approaches both of which must be seen against the background of the ecological frame in which the child functions and to be meaningful must embrace the phenomenologically constructed reality of the child's lived distress.

For more than forty years access to this distress has been sought via a range of measurement approaches to the host of individual characteristics felt to be of importance. Despite this enduring interest and the array of research which it spawned individual practitioners working with school phobic pupils and their families continue to find it a puzzling phenomenom with an uncertain aetiology and variable prognosis.

Given the present situation it is recognized that no individual worker is likely to produce a single account which can function as a general explanation. What might be hoped for, however, is a degree of clarification on some of the issues of definition, incidence and component features via the wide angle lens of the normally developing child. It is to this end that the present study was undertaken.

Chapter 5 RESEARCH DESIGN AND METHODOLGY

The issues under investigation

The above chapters reviewing the technical literature in synergy with the writer's experience as a practising psychologist in a Local Education Authority setting highlighted a number of issues regarding school phobia which seemed to call for clarification or further investigation and provided both the framework and the constraints in generating the hypothesis evaluated in the present work.

Firstly the issue of the incidence of pupils with school related anxiety in the mainstream setting but who none the less managed to attend arose. The literature reviewed in Chapter 2 highlighted the three fold increase in cases of school phobia referred when a special clinic was set up (Waldfogel et al 1956). This would appear to be the only (and now somewhat dated) quantification of this issue with more recent reminders of 'a large minority' with 'massive underlying reluctance to attend school' (Hersov 1979) and the comment that school phobia is the 'tip of the ice berg' (Heath 1983) strongly suggesting the need for investigation. Does such a group with anxieties similiar to clinically defined school phobics exist in mainstream schools in Britain?

How large is this group? Are there subgroups? Indeed the question 'are there pupils with no anxiety regarding school?' needs to be asked. Thus the logically determined first issue to be investigated in the present work concerns whether such a group or groups can be reliably and validly identified in the population.

If an anxious group (or groups) are identified the comparison of this group with clinically defined school phobics should prove a fruitful area. The literature review has identified a number of demographic features which are most likely to prove relevant. The first hypothesis to be tested following the determination and evaluation of a typology of school related anxieties is that the groups identified will vary systematically in terms of the four demographic variables included.

The social class variable is of known importance in terms of general school attendance problems (Fogelman and Richardson 1974, Galloway 1980, Reid 1980) though there are contradictory findings in terms in relation to social class and anxiety regarding school (Heath 1983, Hersov 1960, Hampe et al 1973). Cattell (1966) points out that in general and cross culturally higher anxiety levels occur in lower socio economic groupings. It would thus be unwise not to include some evaluation of this variable. The hypothesis under investigation is that there will be social class differences as a function of the child's level of anxiety in relation to school attendance.

The issue of age also emerges from the literature as relevant. Though school phobics have been identified across a wide age spectrum (Sperling 1961, Croghan 1981) age is regarded as a separate and important variable by many (Milman 1961, Waldron et al 1975, Hersov 1960, Blagg 1979). The hypothesis here is that there will be age differences in relation to anxieties regarding school in the direction of younger children displaying more anxiety.

Though often mentioned as a variable intellectual ability has produced less consensus with numerically more workers finding school phobics to be of at least average ability (Johnson et al 1941, Estes et al 1958, Davidson 1960, Blagg 1979, Heath 1983) while some identify sub-groups who are below average (Nursden 1958, Chazan 1962) and others find a more normal spread (Gordon and Young 1976, Hampe et al 1973).

The contradictory findings taken against the backdrop of the high face validity of the notion that ability is important in coping with the demands of school led to the inclusion of this variable. Here the hypothesis is that more anxious groups will differ in terms of their measured ability in the direction of more anxious pupils having somewhat lower ability levels.

Sex of pupil is a potentially very significant variable firstly in terms of differential incidence rates by sex. Here there are contradictory findings at the level of individual papers though a levelling out is reported when subjects are pooled across papers (Levanthal and Sills 1964, Frick 1964, Clyne 1966).

Rather more interestingly some workers have begun to point to the possibility that school phobia may in fact be a different phenomenon in girls than in boys (Heath 1983) with additional concerns related to the suggested poorer prognosis for girls (Tyrer and Tyrer 1974) and in a more general sense in terms of the relationship betweem motivation and ability for girls (Wade 1981a).

In this study preliminary factor analysis of the measuring instruments substantiated the need to analyse the data separately by sex of subject (See section The Decision to Analyse Separately by Sex).

While the above demographic variables (which are by definition rather generalized and global features) may interact with anxiety regarding school and as such are important to investigate they cannot be seen as directly causative agents. More specific aetiological questions must be asked. What individual characteristics emerge from the literature as potentially relevant?

Firstly it is possible that the anxiety felt toward school is merely a more readily defined component in a general proneness to anxiety and as such is but a part of a constellation of other fears. The literature review is rich in comments on this issue but impoverished in terms of empirical investigation. It is said of the school phobic youngster that 'typically' he has other fears (Eisenberg 1958a), or is 'expected' to have other fears (Van Houten 1948), or 'with few exceptions have other phobias' (Talbot 1957) and these other fears or phobias may be a 'wide range' Frick 1964).

However despite a painstaking search no single study has come to light which investigates the issue of the nature and range of other fears among school phobic pupils at an empirical level. Hypothesis two in the present study begins the process of redressing this balance. It is predicted that pupils who are anxious about school will differ not only in terms of having a higher number of other fears but may differ in the focus of their fears.

When the major demographic features of school phobic and other anxious pupils have been investigated and additionally when it is known whether school phobics have a higher incidence and intensity of other non-school fears it will be possible to investigate certain aspects of the school situation. Though this may seem obvious it has not struck all workers in the field in this way - notably those who operate a separation anxiety model (Klein 1945, Waldfogel et al 1956).

There is however strong evidence that many school phobics themselves point to aspects of the school situation as implicated in their difficulties (Hersov 1960, Smith 1970, Chazan 1962, Blagg 1979) and in more general terms Eysenck and Rachman (1965) remind us that a systematic examination of the school situation would indicate a dozen possible sources of school phobia in the school itself.

Both the literature review and the writers own clinical impression point to the frequency with which interpersonal difficulties are nominated as important by the youngsters themselves (Langford 1937, Van Houten 1948, Marklund 1973, Shapiro and Jegede 1973).

Hypothesis 3 in the present study explores such social anxieties in some depth via seven sub hypotheses.

Hypothesis 3a looks first at the question of whether the identified groups will differ on a specially created 'difficulty with friendship' variable. Here the hypothesis is that the greater the level of anxiety experienced in regard to school attendance the higher will be the proportion reporting difficulties in making friends.

Hypothesis 3b examines the issue of the age and sex of friends and whether these friends come from the child's school. While the published literature endorses the importance of friendship in general investigators have not looked systematically at the issues of age and sex of friends. The present study sought to investigate this area. Though not examined with regard to a phobic population there is evidence that poor attenders can have a friendship group other than from their own school (Mitchell 1972). Additionally Hitchcock (1956) indicates that, while school phobics may fear establishing relationships, many may be able to play with younger children.

It is hypothesized the more anxious the pupil is about school the more likely he or she is to regard his or her friends as coming from other schools. It is also predicted that the more anxious pupils will have a higher porportion of younger friends and that their friends will more often be of the same sex as themselves.

Hypothesis 3c predicts that more anxious pupils will experience a greater sense of vulnerability in the school situation. Hersov (1960) refers to the frequency with which the phobic pupils themselves mention school as the source of their anxieties - a view echoed by Chazan (1962), while Nursten (1958) mentions the phobics fear of attack by 'gangs'.

Hypothesis 3d predicts that the more anxious pupils will experience less general satisfaction with school. Anxiety in regard to school work and level of attainment have frequently been nominated as important with school phobic pupils (Klein 1945, Chazan 1962, Talbot 1957, Hersov 1960, Waldren et al 1975, Ojanan 1980).

Hypothesis 3e predicts that the more anxious pupils will be less popular and more prone to rejection by their class mates as assessed by sociometric measures. Hypothesis 3a looks at self-perceived friendship difficulties while hypothesis 3e seeks to evaluate the same area from a less subjective aspect. This seems important on two counts. Firstly there is evidence that an 'acceptance' score is a better predictor of truancy than is teacher rating (Croft and Grygier 1956) and secondly that sociometrically defined poor status is linked to the presence of psychosomatic ailments (Izard 1959) and to social immaturity (Shaw 1954).

Hypothesis 3f predicts that the more anxious pupils will have more potentially socially isolated preferences in spare time activities eg listening to records and fewer outward acting preferences eg attending clubs. None of the published work on school related anxieties appears to have investigated spare time activities. This is a somewhat odd omission. In general it has been argued that the definition of an emotional handicap should include some restriction on freedom of movement (Bower 1969).

Furthermore hypothesis 3f evaluates the area of where the child is when not in school. This is assessed in terms of the distance from home. The prediction here is that when not in school the more anxious pupils will tend to be closer to their home base. This would be in line with the separation theory model of school phobia (Waldron et al 1956, Gittelman Klein and Klein 1980).

Hypothesis 3g examines the impact of the previous issues in terms of the two most obvious school avoidance strategies namely truancy and staying off school by pretending to be sick. It is predicted that the more anxious groups will be more prone to absences due to pretended sickness. Waller and Eisenberg (1980) highlight a paediatric masquerade syndrome in which the phobic child presents with physical symptoms which prove not to have an organic base. Additionally there is evidence that poor sociometric status is associated with more psychosomatic symptoms (Izard 1959).

Traditionally a clear distinction is drawn between truancy and school phobia (Broadwin 1932, Warren 1948, Berg et al 1969). However there is some evidence that larger proportions of pupils admit truancy than 'school register' based data reveals (N.C.D.S 1980). The prediction here is that smaller proportions of more anxious pupils will have used the truancy option.

Hypothesis 4 rounds off the present study by examining the impact of the school anxieties on sleep related difficulties. Here it is predicted that those pupils who are most anxious in regard to school attendance will display the highest frequency of sleep related difficulties in terms of getting off to sleep, unwelcome reawakenings and nightmares.

Sleep was investigated for four main reasons (a) sleep difficulties are known to be a reasonably sensitive indicator of emotional problems (Thomas 1976), (b) night-time is a unique transition period between one day and the next (c) the writers personal experience in working with school phobic pupils confirms that sleep related difficulties are common. Such difficulties have also been implicated by other writers on school phobia (Goldberg 1953, Blagg 1979) and (d) the time spent asleep (or in trying to sleep) is a considerable proportion of the 24 hour unit.

It is hoped that by examining the childs experience of school, his or her spare time activities and reactions at night-time that a more holistic view will be established.

Methodological Overview

Inevitably methodology is influenced by the nature of the above questions. In this study the term school phobia is favoured over the competing term school refusal which is used in a considerable part of the literature. This is because the writer's practical clinical experience strongly suggests that the anxiety component is invariably present in the condition. Additionally the term school phobia avoids the misleading implication of wilfulness evoked by the word 'refusal'. One has to bear in mind, however, that the two terms are largely used interchangeably.

A three stage research strategy was evolved:

Stage 1 The cooperation of professional colleagues both in the Schools Psychological Service and in the local Child Guidance Clinics was elicited. The request was for access to the school phobics on their caseload or for them to collect the relevant data on behalf of the project if this seemed the more appropriate course of action. Colleagues were also requested to help validate the assignment to diagnostic category of any anxious pupil seen as part of the study.

The methodological heart of the present study was to establish a working measure of the presence of school phobia which could then be used with the mainstream school-attending population to evaluate how many pupils there are with a similiar anxiety profile.

To establish this measure a thorough literature search - mostly from English language psychological, psychiatric and educational journals - was undertaken. This was supplemented by a retrospective analysis of the psychological services files on problem attenders following analytic induction procedures (Turner 1953).

Stage 2 The data generated in stage one were utilized to produce a preliminary pupil questionnaire which was then refined in a pilot study. The resultant measure was then used to identify pupils with a school phobia like anxiety profile. A random sample of mainstream schools was drawn and their cooperation negotiated. The measures in the study were then administered to each of the pupils in the sample.

Stage 3 On the basis of stages 1 and 2, three groups of mainstream school-attending pupils were identified representing levels of anxiety in regard to school from school-phobic like to entirely free of anxiety. Statistical and other analyses were undertaken to evaluate how these groups differ from the clinically defined phobics and from each other.

SAMPLE DESIGN

The School phobic sample:

The school phobic sample in this study was drawn from the schools of one Outer London Borough. This is the same Borough from which the mainstream school sample is drawn. All of the pupils in the phobic sample met the criteria for clinical caseness used in this study. The criteria are those laid down by Berg and colleagues (Berg et al 1969).

This is a four component definition involving: (a) Severe difficulty in attending school amounting to prolonged absence (b) Severe emotional upset - shown by symptoms such as excessive fearfulness, undue tempers, misery or complaints of feeling ill without obvious organic cause on being faced with the prospect of going to school (c) Staying at home with the knowledge of the parents when they should be at school at some stage during the course of the disorder and (d) absence of significant anti-social disorders such as stealing, lying, wandering, destructiveness and sexual misbehaviour.

The school phobic sample consists of those consecutively identified pupils to fulfil the definitional requirements during the period of data collection. It involves 30 secondary age boys and 19 secondary age girls. In the three years of data collection only 2 junior age pupils emerged to meet the stringent criteria in use. No further analysis was undertaken with junior age pupils because of the very small numbers involved.

All the school phobics had been referred either to the School Psychological Service for the Borough or to one of the three Health Authority run Child Guidance Clinics. The diagnosis of school phobia in each case was made by two workers - the present researcher and either another experienced child psychologist or child psychiatrist.

The above attempts to safeguard the diagnostic validity of the school phobic group does not of course insure that the obtained sample is random. Indeed it must be said that no sample of school phobics is truly random. This is a common problem in research which includes a clinically defined group which is 'diagnosed' post referral from other agencies. One has to bear this in mind when interpreting the obtained results. However the use of the same criteria for caseness as other work at least permits comparability to be established even if we cannot be confident of randomness.

The mainstream sample

In this study the mainstream school sample employed is drawn from the same Outer London Borough as the school phobic sample. The importance of careful sample design has been highlighted by many workers (Moser and Kalton 1975).

The sampling frame used is the Local Education Authorities List of maintained secondary schools. The sampling procedure is without replacement and therefore generates a simple random sample (Moser and Kalton op cit).

It should be noted however that it is a feature of the authority in question that all but two of its secondary schools at the time were single sex. All of the schools to emerge in the sample were single sex.

Two boys and two girls schools were chosen by drawing numbers from a hat. No Church schools were included in the draw as this might potentially have introduced confounding effects. Using sex of pupil attending the school in the sense of boys, girls or mixed as a stratification factor was considered. This was not felt appropriate in the present situation as it was deemed to be necessary to have two schools of each type to avoid school specific effects. With only two co-educational schools both would have to be chosen and this would violate the principle of randomness. The present work is therefore restricted to single sex schools.

Only one of the schools approached declined to co-operate. Here the reasons were related to staff morale due to a pending amalgamation. This seemed reasonable. It is, in any case, likely that the uncertainty and unhappiness within the staff group might have transmitted itself in some form to the pupils who were generally aware of the impending changes. This would have had a specially distorting effect in a study on the theme of anxiety in regard to school.

Though the schools included were randomly selected the issue of their representativeness was checked with three sources (1) Senior Officers of the Authority (2) the Education Welfare Service and (3) the Schools Psychological Service.

Source (1) confirmed that the schools were alike on gross criteria and stressed the Authorities policy of balancing intakes. Source (2) reported that the schools did not differ in rates of attendance assessed in terms of total school average attendance rates while source (3) indicated that the schools did not differ in terms of the assigned psychologists subjective evaluation of rates and types of referral.

Within the four schools in the study one class was chosen at random from each year group in years 1 to 5. Sixth forms were not included as these pupils were largely beyond compulsory school age and this fact would have robbed the sample of those who had chosen to leave because of ongoing anxieties in regard to attendance. It was felt necessary to make the choice of classes random since, if the choice had been left to the schools themselves, a degree of bias might unintentionally have crept in.

The question of size of school and of distribution by number of pupils in each of the year groups is potentially important. The four schools to emerge from the selection process produced samples of boys and girls which are remarkably close in terms of overall numbers totalling to some 1500 boys and 1550 girls.

Since the review of literature suggests age to be a variable which may prove relevant it is important to look at the distribution of the numbers in each of the 5 year groups. The following table gives a breakdown of the four schools by the numbers on roll and the total number of pupils in each year group included in the sample.

Table (3) School size by sex of pupil and numbers per year group

School	Size	Sex	Year				
			1	2	3	4	5
A	850	Boys	42	50	48	41	43
B	650	Boys					
C	900	Girls	54	52	53	45	58
D	675	Girls					

The association of the distribution of year group by sex of subject is statistically non-significant (Chi square= 1.2, df=4, p=.871).

Other options for sample design included using a list of classes in year groups across the whole authority as the sampling frame. From this list would be drawn a sample stratified by age and sex composition. This design would have had the advantage of considerably increasing the number of schools represented. However within the manpower resources of this project it would not have been possible to negotiate with the number of institutions involved and the liklihood of a higher proportion being unable or unwilling to co-operate would have been increased. It was felt that the present sample design is sufficiently robust to deal with the research questions posed in this study.

MEASUREMENT ISSUES AND INSTRUMENTS

Since this study is primarily concerned with the identification of pupils with a school phobic like profile of anxieties who attend mainstream schools and an evaluation of how they differ from the clinically defined cases the most crucial measurement issue concerns the evaluation of the pupils' feelings and anxiety about school.

The question of assessing anxiety is complex especially in light of the fact that anxiety is not a simple unitary response but an affective state resulting from a complex interaction of motor, cognitive, and physiological aspects each with their own measurement requirements. These issues are well reviewed by Barrios and colleagues (Barrios et al 1981).

In the present study it was decided to use a questionnaire measure. There were two main reasons for this decision. Firstly there were the logistical limitations on time - individual interview approaches inevitably being very time intensive. Secondly in a project designed to gain information about the nature and extent of a problem which might be small in terms of absolute numbers a strategy which gives controlled access to a sizable representative sample is important. Furthermore it has been coherently argued that each component of anxiety (motor, cognitive and physiological) can be measured by an instrument whose mode may be behavioural, self-report or physiological (Cone 1978).

Having determined that a questionnaire instrument appears to be the most suitable the question of whether to use a preexisting, published device or to purpose build a scale arose. Despite an extensive literature search the present writer failed to find a single British developed and normed instrument which looked specifically at the assessment of the types of anxieties under investigation. A recent American review examines available fear schedules and anxiety measuring instruments (mostly from the United States) and raises issues relating to the inevitable lack of specificity of items when self report instruments are used across a range of situations (Morris and Kratochwill 1983).

Given the above it seemed prudent to develop an instrument specifically for use in this study.

The Pupil Questionnaire

The pupil questionnaire used in this study is reproduced in full in Appendix (1). The production of this questionnaire was based on the considerations of questionnaire design outlined by Oppenheim (1966).

In establishing the item pool for potential inclusion in the questionnaire three primary sources were used: (a) a literature cull of the school phobia literature (b) discussions and interviews with clinically defined school phobic pupils and mainstream school attenders and (c) the files on problem attenders maintained by the local School Psychological Service of which the writer was then a part.

On the basis of the above three sources a pilot form of the questionnaire was established. Field testing took place on an availability sample of one school to which the researcher had ready access as the assigned psychologist. It was also shown to members of the parent/teacher association for their comment and to a group of psychologists experienced in working with children with school related anxieties.

The above field testing led to a reduction in the number of questions and to some changes in wording of items. The final form of the questionnaire (Appendix 1) consists of 45 questions. The first 20 of these items are arranged along a scale from strongly agree to strongly disagree. The order of presentation of these items was randomized.

Items 21 to 45 are also randomized in order of presentation. Note however that with these items questions which relate to one another in a logical sequence eg the presence or absence of a fear and then its self-judged seriousness are treated as one item in the randomization.

Items 1 to 20 were separately randomized as it was felt that keeping all items with the same general format together would be of some value on maintaining a reasonable clarity of presentation. An attempt was made to avoid the effect of acquiescent response set by having half the items with a favourable response requiring an 'agree' response and the other half a 'disagree' response.

The final 45 item form was administered to a sample of 225 boys and 261 girls (See section on Sample Design). Those questionnaire items which achieved an interval level of measurement were subject to exploratory factor analysis (Nie et al 1975). This was undertaken because of the pragmatic need to reduce further the data to manageable proportions and the methodological need to investigate whether there is an underlying pattern of relationships. In factor analysis patterns of relationships are determined via correlations which cluster together producing a set of factors which may be examined to see if they make some form of psychological sense as source variables.

In this study Principal Factoring with Iterations was used and the results rotated to oblique solution with Kaiser normalization. Though orthogonal factors are regarded as mathematically simpler, oblique factors appear empirically more realistic (Nunnally 1967). In a helpfully clear account of factor analysis Nunnally (op cit) advises that all unrotated factors with eigenvalues that are greater than one be used for subsequent rotation and that any factor which emerges with no loadings greater than .3 be deleted. This is the procedure adopted here.

Since there is evidence that sex differences may be relevant in the field of study under investigation it was decided to analyse the questionnaire data separately by sex of subject (Heath 1983, Eysenck 1969, Entwistle et al 1968). The obtained results reinforce that such separate analysis is prudent. The variables included in the factor analysis are pupil questionnaire items which approximate to an interval level of measurement.

The questionnaire items included are items 1 to 20 (variables 8 to 27), items 23 to 25 (variables 30 to 32), item 27 (variable 40) item 32 (variable 53) and item 38 (variable 67). Appendix 1 reproduces the pupil questionnaire.

Though 4 significant factors emerge for each sex, the factor structures and weightings are different for boys and girls. Appendices (2) and (3) list the variables and their factor weightings. All weightings in a factor greater than .3 are used.

Table (4) Factor Structure and Weightings - BOYS

Factor 1 (eigenvalue 3.57) accounts for 42.6% of the variance. It consists of the following questionnaire items.

V3	I am usually satisfied with my own behaviour in school	.417
V10	My parents are usually satisfied with my behaviour at home	.633
V13	I am usually satisfied with the standard of my own work in school	.469
V15	My parents are usually satisfied with the standard of my work in school	.672
V17	My teachers are usually satisfied with the standard of my work in school	.538
V20	I like school	.642
V24	My teachers are usually satisfied with the standard of my behaviour in school	.727
V27	I am usually happy at home	.462

This factor was labelled General Satisfaction in School (GenSatSch) since most of the items involve pupils reporting satisfaction from their own point of view or the belief that their parents or teachers regard them positively in relation to the standard of work or their behaviour in school.

Factor 2 (eigenvalue 2.52) accounts for 30.1% of the variance. It consists only of the following 3 items.

Table (5) Psychosomatic Involvement - BOYS

V31	Unwelcome nighttime waking	.294
V53	Frequency of Psychosomatic symptoms in relation to school attendance	.301
V54	Self perceived seriousness of above symptoms	.763

It is clear here that variables 53 and 54 are overwhelmingly the crucial features. Indeed V31 just fails to reach the .3 weighting. It is included here since it is so close to the criterion and since subsequent evaluation reveals sleeping difficulties as important. This factor is labelled Psychosomatic Involvement (PI).

Factor 3 (eigenvalue 1.25) accounts for 14.9% of the variance. This factor consists of the 8 variables presented below with their respective factor weightings.

Table (6) Vulnerability in School - BOYS

V14	I am sometimes teased at school	.434
V16	Sometimes I feel afraid of my teacher	.303
V18	Sometimes I become worried or frightened without any special reason	.476
V19	This class is too badly behaved for me to get any proper work done	.479
V22	I don't like changing for games or having showers in school	.373
V25	I am sometimes bullied in school	.309
V26	Sometimes I worry that something could happen to my mum or dad while I'm in school	.563
V67	Self perceived seriousness of fears	.330

Most of the items which comprise this factor are negative in psychological flavour relating to threat eg bullying. This factor is named Vulnerability in School (VulSch). Note however that two of the items (V26 and V67) do not relate directly to events in school though V26 relates to worry about parents while the child is in school.

Factor 4 (eigenvalue 1.03) accounts for 12.4% of the variance. It consists of the following 5 items.

Table (7) Interpersonal Anxiety - BOYS

V9	Sometimes I become anxious at the thought going to school but I don't know why	.374
V11	I would go to a different school if I could	.455
V21	Sometimes I feel I have no one I can really talk to	.491
V32	I have bad dreams which wake me in the night	.403
V40	Self perceived difficulty in making friends	.371

This factor loads mostly on items reflecting a sense of isolation and the desire to change school. Labelling this factor is somewhat problematical since it is difficult to know on this data alone whether the sense of social isolation or the school related anxiety contributes most. Embedded against a background of clinical experience of working with children the present writer judged that the interpersonal component is most theoretically relevant here. Hence this factor is labelled Interpersonal Anxiety (InPerAnx).

The factors which emerged for boys have been summarized here. The following section relates to the factor analysis of the same questionnaire data for girls. Here it will be seen that, though 4 significant factors again emerge, there are important differences by sex of subject.

Factor structure and weightings - GIRLS

Appendix 3 lists all of the variables entered in the analysis together with their weightings. Below is reported the factor structure of those factors which emerge as significant.

Factor 1 (eigenvalue 2.57) which accounts for 41.7% of the variance. It consists of the the following 4 variables.

Table (8) Psychosomatic Involvement - GIRLS

V9	Sometimes I become very anxious at the thought of going to school but I don't know why	.318
V53	Frequency of Psychosomatic symptoms in relation to school attendance	.791
V54	Self perceived seriousness of these symptoms	.880
V67	Self perceived seriousness of other fears	.353

In terms of the most heavily weighted features namely variables 53 and 54, Factor 1 for girls is similiar to Factor 2 for boys. Note however that V9 does not load on this factor with boys nor does V67. However since variables 53 and 54 appear to have the major influence this factor is given the same initial label of Psychosomatic Involvement.

Factor 2 (eigenvalue 3.24) accounts for 33.1% of the variance. This factor comprises the following 7 variables.

Table (9) General Satisfaction with School - GIRLS

V8	I am usually satisfied with my own behaviour in school	.415
V10	My parents are usually satisfied with my behaviour at home	.453
V13	I am usually satisfied with the standard of my own work in school	.483
V15	My parents are usually satisfied with the standard of my work in school	.672
V17	My teachers are usually satisfied with the standard of my work in school	.533
V20	I like school	.375
V24	My teachers are usually satisfied with the standard of my behaviour in school	.584

This factor is identical with factor 1 for boys with the exception that with boys V27 'I am usually happy at home' is included. It was felt that the similarities were so great that to use a different name for the factor would be misleading - hense this factor is also called General Satisfaction with School (GenSatSch).

Factor 3 (eigenvalue 1.15) accounts for 14.8% of the variance. This factor comprises the follwoing 6 variables.

Table (10) Vulnerability in School - GIRLS

V14	I am sometimes teased at school	.514
V18	Sometimes I become worried or frightened without any special reason	.424
V19	This class is too badly behaved for me to get any proper work done	.576
V21	Sometimes I feel I have no one I can really talk to	.613
V25	I am sometimes bullied at school	.460
V27	I am usually happy at home	.366

This factor is very similar to (but not identical with) Factor 3 for boys. With girls however it contains two additional variables namely V21 and V27. However it was felt that the major items in the factor for both boys and girls are so close that it would be more misleading to give it a different name. Thus Factor 3 for girls is also known as Vulnerability in School (VulSch).

It should be noted however that the slight differences in factor composition must be borne in mind in interpreting the outcome of any results of analysis based on new variables created.

Factor 4 (eigenvalue .806) which accounts for 10.4% of the variance. This is comprised of only two variables.

Table (11) Factor Structure and Weightings Factor 4 - GIRLS

V55	Staying off school by pretending to be sick	.629
V56	Frequency of truanting	.460

This factor is reported though its eigenvalue is less than 1. Primarily the reasons for this is that it highlights a further divergence by sex of subject and may prove to be of theoretical interest.

It should be noted, however, that the value of this questionnaire is not restricted to the outcome of the factor analysis. Many of the items measure on a nominal level eg whether the pupil has or has not a part time job or a bedroom to his or her self. Such items could not be included in the factor analysis but later proved to be highly significant.

Reliability of the pupil questionnaire

Since the pupil questionnaire has a mix of items ranging from a purely nominal to an interval level of measurement it is not valid to seek a single estimate of reliability. However it is possible to gain some account of its reliability. Two class groups of boys and two groups of girls completed the questionnaire twice at an interval of one month.

These classes were chosen at random from two schools. The intention here was to generate some data on consistency of response.

Over 95% of the responses on the agree/disagree items were in the same direction on the second administration. Shifts in other responses did not follow any particular pattern.

All of the school phobic pupils and a sample of 10 pupils (5 boys and 5 girls) drawn at random from mainstream classes were interviewed following completion of the questionnaire. This interview was conducted by the writer who then had some 10 years experience in interviewing pupils within the age range. These interviews confirmed that the responses to the questionnaire items largely reflected how the pupils reacted to the home and school situations as this emerged from direct interview.

Given the factorial integrity of the instrument and the consistency of responses over a one month interval together with that form of validation possible from direct interview, it is concluded that the questionnaire used in this study is a reliable and valid measure of the pupils' responses and feelings about home and school.

The Parental Questionnaire

Home background variables are among the most investigated in the field of truancy and school phobia though researchers have differed considerably in the sophistication of the investigations. Here work ranges from that which elicited the information on home background from the pupils and their schools rather than directly from the families (Cooper 1966) through parental interviews upon which were based clinical judgements (Hersov 1960) to very detailed, carefully constructed questionnaire format instruments sent to a large randomly chosen population (Shepherd et al 1971).

When one examines the evidence specifically on school phobia there is clear agreement on the importance of home background factors and of family dynamics. However there is manifestly not a consensus as to which background factors or aspects of family dynamics are most relevant and the findings appear to be incompatible and at times contradictory. Thus mothers of school phobic children are variously regarded as depressed (Agras 1959), neurotic (Berg et al 1974) and as being of dependant personality type (Eisenberg 1958).

Fathers are regarded sometimes as weak, ineffectual characters (Davidson 1960) and sometimes as very much involved in making decisions about the children and thereby undermining the mother (Waldfogel 1957). To complicate matters still further Hersov (1960) found evidence of both 'types' of fathers in his interviews with the parents of school phobics.

None the less the existing evidence and the extent of the interest in family factors together with the lack of consistency in the findings insure that no study of school phobia can afford to ignore the background family situation.

A major part of the difficulty in evaluating some of the evidence is the fact that so little is known about the families of pupils who make a successful attendance at school. This basic lack of appropriate epidemiological information might well lead to an overinterpretation of descriptive features of the clinical population. The present study therefore proposes to build in a parental questionnaire to help tease out some to the answers to these questions.

The dimensions chosen for inclusion in the parental questionnaire were selected on the basis of the literature cull and of the need to sample some of the same ground covered in the pupil questionnaire but from the parental viewpoint. Appendix (4) reproduces the parental questionnaire and the covering letter sent to parents.

For logistical and resource related reasons the parental questionnaire was distributed to only a sample of parents chosen at random from the list of families involved in the study. No reminder or follow up was possible if a questionnaire was not returned.

The Rutter Child Behaviour Scale

The area of pupil adjustment to and in school is of clear importance in a study concerning anxieties regarding school attendance. There appear to be two main ways in which this could be assessed. Firstly there is the possibility of direct structured interview with a psychologist or psychologically trained person. This has attractive aspects but raises questions of reliability. Additionally there proved to be significant problems in terms of time and practicality given the sample size envisaged.

Since school adjustment lends itself to the use of standardized instruments more formal questionnaire measures were considered next. The Bristol Social Adjustment Guide (Stott 1963) was examined. Though a useful and flexible scale in many ways and with acceptable levels of reliability and validity this instrument proved too long to expect a busy class teacher to complete on every child in his or her class.

When the criterion of fairly rapid administration is added to the natural requirements of reliability and validity the Rutter Childrens Behaviour Questionnaire emerged as the instrument of choice (Rutter 1967). This scale (reproduced in Appendix 5) can be completed on a considerable number of children fairly quickly and is reported as having a test-retest reliability of .89 and an inter-rater reliability of .72 (Rutter 1967 op cit). It has been demonstrated to be a generally good discriminator of children with behavioural and emotional problems and can yield separate neurotic and anti-social sub-scores.

The Sociometric Instrument

Given that data are being collected from the pupils' own points of view, from their parents' angle and from the teachers' perception the only remaining unsampled area is that of the peer group. The need to build in a sociometric component emerged for two main reasons. Firstly there is general evidence of links between personal adjustment and the quality and status of relationship with peers (Bonney 1943, MacMillan et al 1978), with more specific evidence relating social difficulties to school problems (Davidson 1960, Cooper 1966, Croft and Grygier 1956) and secondly from my own clinical experience of working with school phobic pupils. Here the issue is not simply one of feeling bullied or picked on (though this theme does emerge) but also in regard to feeling isolated and rather friendless.

Based on an evaluation of the methodological arguments presented by Evans (1964) - and more recently updated by Schwarzwald et al (1986) - it was decided to include both positive and negative choices across a number of situations in the scale. Appendix (6) reproduces the sociometric questionnaire.

Pupils were asked to nominate who in their class they would most (and least) like to sit beside, ask for help with their work, go on holiday with and to trust to tell a secret to. Following the completion of this exercise they were also asked to list their best friends and to circle the names of any of these friends who do not attend the same school as themselves.

The sociometric information could be collected only for the mainstream school attending pupils. Because of the very large spread of schools from which the school phobics emerged it did not prove possible to negotiate the sociometric assessment in all of these situations.

Like the pupil questionnaire, the sociometric data generated by use of this instrument were subjected to exploratory factor analysis (Nie et al 1975). Once again separate analyses were undertaken for the boys and girls data. The method of Principal Factoring with Iterations was again used followed by oblique rotation with Kaiser normalization. Four substantial factors were isolated and important sex differences emerged. Details of the outcome of this analysis are furnished in the evaluation of the importance of friendship difficulties.

The collection of sociometric data though relatively simple and usually enjoyable for the pupils themselves has been used remarkably infrequently by researchers in the field of school phobia. This is unfortunate since it provides as close to an objective assessment of the friendship climate or ethos of a child's school day as is possible within available methodologies.

In using sociometric data to augment the information on the pupils the present study has sought to use as many accessible domains of data as possible. It is hoped that by using such diverse sources that a more accurate and cross validated picture will emerge.

The Intellectual Assessment

There is a straightforward sense in which coping with the academic aspects of the school situation must relate, at least in part, to the match between the level of demand made on the pupil and his or her ability. It was therefore deemed necessary to include some measure of ability.

In deciding on which of the many available measures to employ a number of aspects were considered. Firstly it was felt to be important that the measure should, if possible, be standardized on a British population within the age range of the pupils in this study. Secondly it should be of high reliability and validity. Thirdly it should be in a form which permits group administration and not take very long to complete. Fourthly it should not be open to contamination by any possible difficulties with reading and Fifthly it would be an advantage if it had been used in at least some previous research in the general area.

The Ravens Standard Progressive Matrices were selected as coming closest to meeting all five criteria (Raven 1947, 1960). It consists of 60 matrix items arranged in 5 sets of 12 with each set involving a different principle of solution. The different sets of 12 are graded in terms of overall increasing difficulty - each set beginning with easier items then gradually working up to more difficult items. It has a test-retest reliability of .9 and appears free from sex differences (Court and Kennedy 1976).

DATA COLLECTION

All data collection in this study was undertaken by the researcher working alone. The headteachers of the participating schools were fully briefed in a detailed manner about the nature and purpose of the study. The individual class and form teachers knew only the the research was a personal (as opposed to a Local Authority) project and that the results were likely to form part of the writer's doctoral dissertation. If questioned more fully by individual teachers it was decided to explain that the work concerned pupils feelings and attitudes to school. In this way it was hoped to avoid detailed advance knowledge influencing how teachers set up the sessions with the pupils and the unintentional transmission of the teachers' own attitudes.

Though the researcher was in all cases introduced to the various classes by the relevant teachers these teachers did not stay in the room either during the explanations of the work or when the pupils completed the various measures. It was felt that the presence of the teacher might influence the outcome given the particular nature of the study.

All pupils in the classes chosen were expected to participate and absentees were followed up on subsequent visits. This was especially important in a study designed to look at anxieties in regard to school attendance. However, it must be noted here that a cost of completeness could potentially be resentment at non-volunteer status. This risk was considered when the questionnaire was constructed and the final item of the pupil questionnaire sought to sample this area.

V74 (Pupil Questionnaire item 45) asked 'Did you enjoy completing this questionnaire? and allowed the options 'a little', 'a lot', 'not sure', 'didn't enjoy it much' and 'didn't enjoy it at all'.

The question of the ethics of the present study came into focus during the pilot stage. It had been felt that the inclusion of paper and pencil personality tests would have been helpful and certainly had generated useful information in other work (Blagg 1979, Heath 1983). However some of the parents of pupils in the pilot school were worried about this. The issue of parental permission is of considerable methodological as well as ethical importance.

Firstly pupils whose parents did not want them to participate might systematically differ on important characteristics. Secondly those pupils whose parents had not returned the 'consent' forms would have to be excluded and thirdly the task of sending out many hundreds of letters and collating the responses would be a major logistical task. There would also be knock on problems for the schools in the sense of what to do with those pupils whose parents had opted out while the others were engaged on the various tasks and the issue of what the impact on those not permitted to participate might be had to be considered. Furthermore the incidence figures based on such a sample as emerged would be of very questionable value.

Reference to previous work did not prove helpful here since, though no doubt the ethical issues were considered, the deliberations were not separately reported. As a consequence it was necessary to have recourse to more general material.

Checking the ethical guidelines pertaining to research with children in the Members' Handbook of the Association of Educational Psychologists confirmed that it would be improper to use 'psychological' tests where the parents had not given full and informed consent. However the Guidelines also offered a way forward. Section 19 of the Code of Professional Practice reads as follows:

> 'Normally children will not be used as subjects of an investigation unless the permission of the parents or guardians had been obtained. However - (a) parental permission may not be necessary where investigations of a survey nature are planned; that is to say investigations that aim to collect information and do not aim directly to modify the behaviour or personality of the subject.....'
>
> A.E.P. Professional Guidelines 1981

As an educational psychologist employed by the Authority in question the present researcher already had considerable, legitimate, access to information from school files. It was decided however that the most ethical way forward would be to determine not to use this privileged access or to include any measures other than those covered by the Guidelines. Accordingly individual personality tests were not included in the package of measures. Since the materials used would be available to the schools acting in 'loco parentis' it was felt legitimate to proceed in the manner described.

The package of measures decided on was administered by the researcher. The order of presentation of the various measures was randomly varied to confound any possible order of administration effects (Sarason et al 1960). Data collection took place at any time during the school year convenient to the examiner and school though the first half of the first terms were avoided for all year groups as this was regarded as a settling in phase.

Parental questionnaires were sent by post to a random sample of parents together with a covering letter (Appendix 4). A reply paid envelope was provided. The logistics of this exercise required that the parental questionnaire was distributed before the subgroups were identified. This had the negative effect of not permitting stratification of parent sample by sub-group size. Time and resource limitations did not permit follow up letters.

The data collection in the mainstream school took place over a two year period. The collection of data on the school phobic sample took place over a three year period. Though the numbers involved in the phobic sample are relatively small classically research based on clinical conditions of low frequency of occurrence takes considerable time to generate meaningful numbers. The combination of this and the use of necessarily stringent criteria for inclusion accounts for the time scale. It is not felt likely that the timescale in itself affected the outcome since the data collection on each subject took place within one month from their completing whichever measure was first administered.

DATA ANALYSIS

Overview of Analysis Strategy

There are two phases to data analysis in this study. The first and crucial initial phase involves the validation of the typology implicit in the hypothesized existence of the school phobic like groups among the mainstream school attending populations. Unless one can demonstrate the existence of these groups there are no further grounds to proceed.

The second phase involves the evaluating of how these hypothesized groups differ from one another and both the theoretical and practical importance of any such differences which emerge.

This study involves the use of variables which, in terms of levels of measurement, range from interval level as in the use of the Ravens Matrices to nominal level variables eg V73 regarding whether or not the pupil has a part time job.

Scoring of measures, Coding and Accuracy checks.

The scoring of the tests and various questionnaires and the transfer of these scores to computer coding sheets was undertaken by the researcher and a volunteer helper.

At the planning stage the measurement instruments were designed to permit stencil scoring in the interests of speed, accuracy and the building in of scoring checks.

The researcher and volunteer acted as crosschecks in that each sheet was scored twice. The same procedure of double scoring applied to the clerical task of transferring the scores to the computer code sheets. Though this was very time consuming it was necessary since any inaccuracy in scoring or in transfer could be highly distorting to the final outcome. The actual transfer of codes from the scoring sheets to computer tape was undertaken via the professional staff in the Open University Academic Computing Service.

Statistical Procedures

All statistical analysis of data in this study was undertaken using the Statistical Package for the Social Sciences (Nie et al 1975).

The initial validation of the typology of anxious groups was based on the classificatory techniques available as an outcome of Discriminant Function Analysis (Klecka 1980). Discriminant analysis is a statistical technique which permits the researcher to study the differences between two or more groups with respect to many variables simultaneously. This is accomplished by forming one or more linear combinations of variables and these linear combinations are called discriminant functions (Klecka op cit). In this study stepwise analysis (Method Wilks) was used. With stepwise procedures independent variables are selected for entry into the analysis on the basis of their discriminating power. At each stage the 'next best' discriminator is chosen till maximum discrimination is achieved.

The Classificatory Procedures available as part of the outcome of Discriminant Function Analysis identifies the likely group membership of each subject when the only information known is the subjects obtained values on the discriminating variables.

Once the validity of the groups is established using the Discriminant procedures the task becomes one of exploring the differences among the groups. As indicated above variables included in this study range from interval to nominal levels of measurement.

Two sorts of analysis were undertaken with the interval level variables (a) Correlational Analysis and (b) Analysis of Variance. In (a) Pearson Product Moment Correlations were used. These are zero order correlations in that no controls for the influence of other variables are involved. The correlation coefficient is a measure of the strength of the association between two variables. In (b) Analysis of Variance One Way analysis is used. Analysis of variance is a technique which permits the evaluation of whether groups differ significantly among themselves. Subprogramme ONE WAY available on SPSS permits the use of a variety of subsidiary statistical procedures (Nie et al op cit). In the present study a significant F ratio led to the use of a posteriori contrasts in order that all possible pairs of group means be compared. Scheffes test was used as it permits exact probabilities to be calculated even where the group sizes are unequal.

Where data are at a nominal level of measurement Chi Square is employed. This is a non parametric test commonly used when data are in the form of frequency counts. Essentially Chi Square compares a set of obtained frequencies with a set of theoretical frequencies to determine if the differences between them is significant.

In the present study the level of statistical significance beyond which the null hypothesis is to be rejected is the .05 level. This level was chosen largely because it represents the most commonly used minimal level in the published school phobia research. An obtained significance level of .05 indicates that the null hypothesis can be rejected since the mean difference found exceeds the mean difference that would be found five times in a hundred samples if the population mean difference was zero (Borg and Gall 1979).

Though a variety of statistical approaches has been used in this work considerable care has to be taken not to over interpret obtained significance levels. Morrison et al 1970 conclude that between the years 1947 and 1967 a majority of the articles reported in the American Sociological Review incorrectly employed significance tests. That is to say they were used in situations where a sample was unspecified beforehand or where non probability sampling techniques were employed. A similar criticism may be levelled at some psychological research. There is evidence that psychological research is somewhat prone to over-invest in the outcome of significance tests which are not always used appropriately (Bakan 1966).

THE DECISION TO ANALYSE SEPARATELY BY SEX

The determination to analyse all of the data produced in this study separately by sex of subject represents one of the most important methodological decisions made and requires justification.

Workers interested in the relationship between personality and attainment have noted the importance of analysing data by sex of child (Entwistle et al 1968, and Eysenck et al 1969). Sex differences have also been found in attitude to school (Mitchell and Shepherd 1967) and, in examining the psychological impact of school Minuchin et al (1969), concluded that meaningful comment could only be made by describing the boys and girls separately.

Two aspects of sex differences potentially need to be considered namely sex differences in incidence and the logically separate question of sex difference in the underpinning structure or nature of the condition. In the former the issue seems to be one of proneness to develop the problem and the latter to elaborate the nature of these differences.

The literature on school phobia provides a range of views on both the above aspects. Where workers have adopted the expedient of pooling data from a number of published studies the general finding has been of approximately equal numbers of boys and girls (Levanthal and Sills 1964, Frick 1964, Clyne 1966).

The present writer pooled data from 36 papers with more than 6 subjects in each sample and reporting sex of subjects. The total number of school phobics involved was 1275, 52% (659) being boys and 48% (616) being girls.

Additionally some workers have intimated that there may be differences in adult outcome for girls and boys who suffer from school phobia. While some report a bettter prognosis for girls (Milman 1961 working with younger subjects) a much more pessimistic outcome for girls was reported by Tyrer and Tyrer (1974).

There now appears to be evidence that school phobia may be a different phenomenon in boys than in girls (Heath 1983). He found that male phobics had significantly lower self esteem scores than their peers and than school phobic girls. He subsequently managed to show that in the girls in his sample academic self esteem was not based on 'reality' in so far as it is unrelated to measures of attainment or ability whereas the academic self-esteem of both norm and phobic boys was related to these measures.

Other workers have reported that boys are more timid and socialllly withdrawn (Hersov 1960) and immature, passive unadventurous and with few friends (Davidson 1960). Exploratory factor analysis of both the pupil questionnaire and sociometric devices used in this study (See Measuring Issues and Instruments section) revealed different factor structures for boys and girls and further validates separate analysis by sex of subject.

Chapter 6 TOWARDS A TYPOLOGY OF ATTENDANCE ANXIETIES

The first of the research questions to emerge relates to the existence in mainstream schools of a group or groups who are anxious about being there. A number of workers have speculated that such a group of pupils is likely to be found (Waldfogel et al 1956, Shapiro and Jegede 1973, Heath 1983). The present writers own experience with both school phobic and mainstream pupils led him to hypothesize the existence of four groups.

Firstly it is argued that there will be a group who are similiar to clinically defined school phobics in experiencing both general anxieties about school and associated psychosomatic symptoms. Secondly there will be a group who regard themselves as having general anxieties regarding school but who do not have associated psychosomatic symptoms. Thirdly it is suggested that there will be a group who experience psychosomatic symptoms in relation to going to school but no diffuse or general anxiety. Fourthly there will be a group of pupils with neither diffuse anxiety nor psychosomatic symptoms ie an anxiety free group.

The existence of these four groups was investigated using the pupil questionnaire data on 225 secondary school age boys and 261 secondary school age girls. The nature and structure of this questionnaire and the sample design and composition are fully reported in the Design and Methodology section.

Before the mainstream school trawl this questionnaire was administered to a sample of 49 consecutively identified School Phobic pupils - this sample consisting of 30 boys and 19 girls. Variable 9 (Pupil questionnaire item 2) asks pupils to agree or disagree with the statement,

"Sometimes I become very anxious at the thought of going to school but I don't know why"

Variable 53 (Pupil questionnaire item 32) assesses the frequency with which any of the psychosomatic symmptoms occur in relation to school attendance and Variable 54 (Pupil questionnaire item 33) evaluates the pupil's self-perception of the seriousness of the problem.

Twenty nine (96%) of School Phobic (SP) boys agree or strongly agree that they sometimes become very anxious at the thought of going to school (the remaining child opting for 'not sure'). Twenty eight (93%) report some degree of psychosomatic symptomatology in relation to school attendance while twenty five (83%) feel these psychosomatic symptoms represent a serious problem.

Among the nineteen School Phobic girls, sixteen (84%) report agreement or strong agreement that they sometimes became very anxious in regard to going to school. All nineteen (100%) report psychosomatic symptoms. Note here that only eight (42%) are categorical in feeling that this is serious the remaining eleven (58%) being 'not sure'.

It was felt that a robust test of the existence of the first group would be to look for the joint occurrence of agreement on V9 (ie the experience of anxiety in regard to school attendance) with at least one of the psychosomatic symptoms listed in variables 44 to 51, at a frequency of nearly every day or every day. This group is to be known as Anxious Attenders (AA's) since they will have reported anxieties regarding school but continue to attend. Anxious attenders would, by this definition, go to school on a regular basis but experience anxiety at the thought of going and suffer psychosomatic symptoms such as head or tummy aches in relation to attending.

The second hypothesized group would be sought by culling the same pupil questionnaire data for those pupils who agree or strongly agree on V9 (ie they become anxious about going to school) but who do not report any associated psychosomatic reactions on variables 44 to 51. If such a group is identified it will be known as the Diffuse Anxiety (DA) group.

The existence of the third group is tested by seeking a group of pupils who respond by disagreeing with V9 (ie who do not report any general anxiety in regard to going to school) but who experience one or more physical symptoms at a frequenc y of nearly every day or every day. This combination of responses will be used to define a group to be known as Psychosomatic Symptoms Only (PSO's).

The fourth and final group is sought by looking for a group who respond by disagreeing both on V9 (general anxiety about going to school) and who do not report any psychosomatic symptoms. This group will be regarded as the Anxiety Free Control group (CON).

Table (12) presents the figures for the number of boys in each group. The figures are given as a percentage of the total numbers of boys in the mainstream sample (n=225). No percentage can be reported for the phobic sample as they are a clinically defined group drawn from the whole authority.

Table (12) Numbers of Boys in each group

	SP	AA	DA	PSO	CON
Number	30	21	44	4	88
Percentage		9%	20%	2%	39%

SP= School Phobics. AA= Anxious Attenders.

DA= Diffuse Anxiety. PSO= Psychosomatic Only.

CON= Anxiety Free Controls.

Note that these figures leave uninvestigated a group amounting to some 30% of the total. These will be pupils who may have responded 'not sure' or disagree to V9 or had a very low frequency of psychosomatic symptoms. It was felt that if the symptoms were infrequent or not regarded as serious by the pupils that they would not provide a very rigorous test.

Table (13) presents the equivalent figures for the sample of Girls. Once again the percentages quoted are percentages of the total number of girls in the mainstream school sample (n=261).

Table (13) Numbers of Girls in each group

	SP	AA	DA	PSO	CON
Number	19	17	49	9	108
Percentage		7%	19%	3%	41%

Note here that, as with the boys data, these figures leave uninvestigated a group amounting to some 30% of the total.

All that the above tables indicate is that it is possible to use the present data to define these groups into existence. Identifying a number of pupils who conform to the group definitions makes psychological sense only if these groups can be reliably discriminated from each other on variables not directly involved in the definitions.

Due to the very small number in the Psychosomatic Symptoms Only (PSO) group for both boys and girls no further analysis is undertaken here. For the remaining 4 groups the validity of the definitions is investigated separately for boys and girls via the classificatory techniques available as part of Discriminant Function Analysis (Nie et al 1975).

As indicated in the section on Statistical Procedures Discriminant Function Analysis can be used to study differences between two or more groups with respect to many variables simultaneously. The Classificatory Procedures which are a part of the Discriminant Analysis identifies the likely group membership of each subject when the only information known is the subjects obtained values on the discriminating variables (Klecka 1980).

Those variables entered in the Discriminant Analysis together with their standardized co-efficients are reported fully in Appendices (7 & 8). In brief these items are the pupil questionnaire items excluding those used to define the groups. The procedure for both boys and girls was a stepwise analysis (Method Wilks). With stepwise procedures independent variables are selected for entry into the analysis on the basis of their discriminating power. At each stage the 'next best' discriminator is chosen till maximum discrimination is achieved.

Following the determination of the discriminant functions the classification procedure identifies the likely group membership when the only information used is the subjects obtained score on the discriminating variable.

Table (14) presents the results of the Classificatory Analysis for Boys. This indicates that a very satisfactory level of discrimination is achieved.

Table (14)

Results of Classificatory Analysis for BOYS on on pupil questionnaire data

	N	SP	AA	DA	CON
SP	29	18 62.1%	4 13.8%	3 10.3%	4 13.8%
AA	21	3 14.3%	14 66.7%	4 19%	0 0%
DA	43	0 0%	6 14%	29 67.4%	8 18.6%
CON	87	13 14.9%	4 4.6%	8 9.2%	62 71.3%
% CORRECTLY CLASSIFIED 68.33%					

Note that this pattern of classification goes somewhat against prediction in that School Phobics are as likely to be misclassified as Controls as Anxious Attenders.

This classification is achieved on the basis of the three Discriminant Functions which emerged. Function 1 accounts for 50% of the variance; Function 2 for 38% of the variance and Function 3 for under 12%. It has been pointed out that while the actual numbers representing the eigenvalues cannot be interpreted directly where there is more than one function they help determine the relative magnitude of each to see how much total discriminative power each has (Klecka 1980). Table (15) presents the eigenvalues, the relative percentages of variance accounted for and the Canonical Correlations.

Table (15) Eigenvalues, Relative Percentages and Canonical Correlations for Discriminant Function Analysis - BOYS

Canonical Discriminant Function	Eigenvalue	Relative Percentage	Canonical Correlation
1	.69107	50.39	.639
2	.52983	37.91	.584
3	.16046	11.70	.392

NB the Canonical Correlation coefficient summarizes the degree of relatedness between the groups and the discriminating function. The Canonical Correlation squared is the proportion of variation in the discrimination function explained by the Groups (Klecka 1980).

From the above table it is clear that the first two functions account for most of the variation with the third function accounting for under 12%.

It may be helpful to look at which variables included in the analysis contribute most to the discrimination. The standardized coefficients indicate the relative contribution. While Appendix (8) lists all the variables entered in the analysis and a table of standardized coefficients to five decimal places Table (16) overleaf summarizes these results.

It can be seen from this table that the 68% classificatory accuracy among the 4 groups of boys is achieved on the basis of the weighted combinations of 21 variables namely General Satisfaction With School (GenSatsch), Vulnerability in School (Vulsch), Interpersonal Anxiety (Inperanx), Liking new work in school (V12), Whether or not he gets on equally well with both parents (SME), Whether or not he has a bedroom to himself (RM), Whether his friends come from his school (FFS), and are the same age as himself (SMAG), or younger (YNG), Whether he has any problems sleeping (V30), or unwelcome night-time waking (V31), Whether watching TV is a major leisure pursuit (V33) or a hobby or sport (V35), or listening to records or the radio (V37), or attending a club (V38), Whether he has truanted by himself or with others (V57), Whether he is frightened of insects (V58), or darkness (V59), or going out (V62), or has any other fears (V66).

Table (16) Functions and Standardized Discriminant Functions Coefficients - BOYS

	Function 1	Function 2	Function 3
GenSatsch	0.37	-0.21	-0.09
Vulsch	-0.09	-0.14	0.48
Inperanx	-0.29	0.08	0.36
V12	-0.07	-0.29	-0.11
SME	0.04	0.41	0.21
RM	-0.29	0.37	0.25
FFS	-0.34	0.02	-0.04
SMAG	0.29	-0.04	0.09
YNG	0.21	-0.31	0.21
V30	0.07	0.53	0.22
V31	0.28	0.07	-0.18
V33	-0.33	0.05	-0.26
V35	0.02	-0.09	-0.59
V37	-0.07	-0.20	0.23
V38	0.32	-0.12	-0.07
V55	0.29	0.36	0.04
V57	0.44	0.15	0.39
V58	-0.46	-0.16	-0.24
V59	0.43	-0.13	0.29
V62	0.09	0.56	0.04
V66	0.14	-0.18	0.30

If analysis is restricted to pairwise comparisons even higher levels of classificatory accuracy are possible. Using the same input variables table (17) reports the outcome of these classificatory analyses.

Table (17) Pairwise Comparisons-Pupil Data - BOYS

PERCENTAGE CORRECTLY CLASSIFIED			
	SP	CON	OVERALL
SP	24 (83%)	5 (17%)	85%
CON	12 (14%)	76 (86%)	
	SP	AA	OVERALL
SP	25 (83%)	5 (17%)	88%
AA	1 (5%)	20 (95%)	
	SP	DA	OVERALL
SP	27 (90%)	3 (10%)	95%
DA	1 (2%)	42 (98%)	
	AA	CON	OVERALL
AA	20 (95%)	1 (5%)	89%
CON	11 (13%)	77 (87%)	
	AA	DA	OVERALL
AA	20 (95%)	1 (5%)	91%
DA	5 (11%)	29 (89%)	
	DA	CON	OVERALL
DA	36 (82%)	8 (18%)	86%
CON	10 (12%)	77 (88%)	

Much theoretical interest in the present study centres on the differences between the SP and AA groups. These are the groups which by the group definitions are most alike in their self declared patterns of anxiety regarding school - with the exception that the AA's have managed to maintain attendance. SP's can be distinguished from AA's on a single linear discriminant function involving only 9 pupil variables in 88% of cases (eigenvalue 1.38, canonical correlation .76).

Table (18) Variables and Standardized Coefficients SP and AA - BOYS

Variable	Standardized Coefficients
Vulnerability in School (Vulsch)	0.52
Liking new work in school (V12)	0.95
Never find work difficult (V23)	0.53
Gets on equally both parents (SME)	-0.48
Have bedroom to self (RM)	-0.57
Friends equally both sexes (EQL)	0.57
Attends a club (V38)	0.71
Staying off school without parents knowing (V56)	0.89
Fear of Insects (V58)	0.29

GIRLS

The tables below present a parallel set of results for girls. Once again there is a highly satisfactory level of discriminatory and classificatory success.

Table (19) Results of a Classificatory Analysis for GIRLS on pupil questionnaire data.

	N	SP	AA	DA	CON
SP	16	15 93.8%	0 0%	0 0%	1 6.3%
AA	17	1 5.9%	12 70.6%	2 11.8%	2 11.8%
DA	46	0 0%	4 8.7%	36 78.3%	6 13%
CON	100	3 3%	8 8%	19 19%	70 70%
% CORRECTLY CLASSIFIED 74.3%					

As with the boys the pattern of classification goes somewhat against prediction on points of detail. While SP's are highly likely to be correctly identified, those AA's who are misclassified are as likely to be misclassified as DA's or CON's. However, in a general sense, the direction of effect is as predicted with only 3% of CON's misclassified as SP's, 8% as AA's and 19% as DA's - that is to say increased accuracy of classification with heightened anxiety about school among the subjects.

The classification is based on the following 29 variables which are listed with their standardized coefficients in Table (20). General Satisfaction with School (GenSatSch), Vulnerability in School (Vulsch), Wishing to go to another school (V11), Enjoying going on to new work in school (V12), Dislike of changing for games or having showers (V22), Feeling that teachers are usually satisfied with their behaviour in school (V24), Worrying about their parents while they're in school (V26), Get on equally well both parents (SME), Get on neither parent (NEI), Having a bedroom to themselves (RM), Difficulty with sleeping (V30), Unwelcome reawakenings (V31), Bad dreams (V32), Whether watching TV is a major leisure pursuit (V33), or Playing with friends (V34), or Aimlessly wandering (V36), or Listening to records or the radio (V37), or Attending a club (V38), Whether she experiences difficulties in making friends (DF), and Whether her friends come from her own school (FFS), Whether they are older than her (OLD), or a Wide mix of ages (MIX), Whether there are equal numbers of boys and girls among her friends (EQL), Whether she is frightened of Insects (V58), or Darkness (V59), or Going out (V62), or Heights (V64), or any other fears (V66), and how serious are these fears (V67).

Though the girls' and boys' lists have 19 items in common they differ considerably in the relative position of these 19 items ie V30 relating to sleeping difficulty not only loads on a different function with girls but differs in the weight it is accorded. This adds further validity to the decision to analyse the data by sex of subject.

Table (20) Functions and Standardized Coefficients

Variable	Function 1	Function 2	Function 3
GenSatSch	0.12	-0.45	-0.55
Vulsch	-0.11	0.16	-0.26
V11	-0.27	0.47	0.14
V12	-0.12	-0.01	0.32
V22	0.45	0.16	-0.03
V24	0.32	0.39	0.33
V26	-0.18	0.06	0.30
SME	0.11	-0.17	-0.18
NEI	0.12	0.43	-0.45
RM	0.30	-0.02	-0.06
V30	0.45	0.16	0.17
V31	-0.11	-0.34	-0.11
V32	0.24	0.12	0.07
V33	0.17	-0.05	0.30
V34	-0.27	-0.15	-0.14
V36	0.21	0.27	0.05
V37	-0.01	0.24	0.48
V38	-0.29	-0.20	-0.14
DF	0.33	-0.30	0.11
FFS	-0.38	-0.03	-0.05
OLD	-0.28	-0.73	0.25
MIX	-0.26	-0.13	-0.03
V58	-0.14	0.41	0.20
V59	0.11	0.17	-0.33
V62	0.41	0.15	0.17
V64	0.09	0.14	-0.39
V66	-0.19	-0.12	-0.16
V67	-0.17	0.45	-0.15

It can be seen that the classification of girls data is also achieved on the basis of three Discriminant Functions. Table (21) presents the Eigenvalues, Relative Percentages and Canonical Correlations.

Table (21) Eigenvalues, Relative Percentages and Canonical Correlations for Discriminant Function Analysis - GIRLS

Canonical Discriminant Function	Eigenvalue	Relative Percentage	Canonical Correlation
1	1.03307	53.07%	.7128
2	0.48595	24.97%	.5718
3	0.42742	21.97%	.5472

As with the BOYS' groups it is important to look at which variables included in the analysis contribute most to the discrimination. Here again the standardized coefficients presented in Table (20) summarizes these findings. However all the variables entered in the analysis and a more detailed table of the standardized coefficients to 5 decimal places are presented in Appendix (8).

Since it is clear that a very high level of classificatory accuracy is possible among the 4 girls groups with 74% overall being correctly classified , it is of interest to look at a pairwise comparison among the groups.

Again a pattern which mirrors the findings with the boys is found. Notably higher levels of classificatory accuracy are obtained. Using the same input variables as in the previous analyses Table (22) presents the outcome of the Classificatory phase among the six pairs of groups.

Table (22) Pairwise Comparisons on Classification Analysis-Pupil Questionnaire Data - GIRLS

PERCENTAGE CORRECTLY CLASSIFIED			
	SP	CON	OVERALL
SP	15 (94%)	1 (6%)	98.35%
CON	1 (1%)	104 99%)	
	SP	AA	OVERALL
SP	16 (100%)	0 (0%)	100%
AA	0 (0%)	17 (100%)	
	SP	DA	OVERALL
SP	16 (100%)	0 (0%)	98.39%
DA	1(2.2%)	45 (97.8%)	
	AA	CON	OVERALL
AA	14 (82.4%)	3 (17.6%)	91.67%
CON	7 (6.8%)	96 (93.2%)	
	AA	DA	OVERALL
AA	16 (94.1%)	1 (5.9%)	92.06%
DA	4 (8.7%)	42 (91.3%)	
	DA	CON	OVERALL
DA	37 (80.4%)	9 (19.6%)	77.85%
CON	29 (23.3%)	79 (76.7%)	

As with the boys' groups most theoretical interest centres on the differences between the SP and AA groups since by the definitions in use these are most alike in terms of their self declared anxieties in regard to school attendance.

SP's could be distinguished from AA's on a single linear discriminant function in all cases (eigenvalue 262.88, Canonical Correlation .99). Table (23) lists the 31 variables required to reach this classificatory level together with the Standardized Coefficients.

Table (23) Variables and Standardized Coefficients - SP/AA GIRLS

Variable	Standardized Coefficient
General Satisfaction with School	-3.14
Vulnerability in School	2.54
School Avoidance (Schavd)	0.57
Would like to change school (V11)	3.98
Like new kinds of work in school (V12)	-0.20
Some fear of the teacher (V16)	-4.01
Dislike changing and showering (V22)	7.59
Never find school work too difficult (V23)	2.78
Feel teachers satisfied with behaviour (V24)	8.27
Worry re. parents while in school (V26)	-3.55
Get on best with father (FA)	2.24

Table (23) Continued.

Variables and Standardized Coefficients

SP/AA - GIRLS

Variable	Standardized Coefficient
Get on best with Mother (MO)	5.51
Get on both parents equally well (SME)	4.88
Get on with neither parent (NEI)	8.13
Have only one parent (ONL)	4.85
Have a bedroom to myself (RM)	1.76
Difficulty sleeping (V30)	3.28
Unwelcome night-time wakening (V31)	-4.07
Bad dreams (V32)	-1.31
TV as major leisure pursuit (V33)	3.66
Playing with friends as leisure pursuit (V34)	4.48
Hobby or sport as leisure pursuit (V35)	-6.54
Aimlessly wandering around (V36)	-0.02
Listening to records or radio (V37)	5.12
Attending a Club (V38)	-1.11
Make Friends Easily (FE)	0.34
Friends come from own school (FFS)	-2.24
Friends mostly same age (SMAG)	4.02
Friends mostly younger (YNG)	1.49
Friends mostly older (OLD)	-0.24
Most of friends girls (GRL)	3.85

The above tables for GIRLS indicate the levels of classificatory accuracy possible on the basis of the pupil questionnaire data. Interesting and important though this is it is restricted to only one on the measurement instruments. To evaluate the cross situational and cross instrument relevance further classificatory analyses were undertaken where the data were available. Among the girls Parental Questionnaire data are available on SP and CON's and a small number of DA's, and teacher completed Rutter Scales data available on AA, DA, and CON's but not SP's. Among the boys Parental Questionnaire data are available for the SP, DA and CON groups. Rutter Scale data are available for AA's, DA's and CON's but not for SP's.

Table (24) GIRLS: Classificatory Analysis of Parental Questionnaire data.

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		SP	DA	CON
SP	19	18 (95%)	0 (0%)	1 (5.3%)
DA	9	0 (0%)	9 (100%)	0 (0%)
CON	25	0 (0%)	0 (0%)	25 (100%)
PERCENTAGE CORRECTLY CLASSIFIED 98.11%				

Table (25) BOYS: Classificatory Analysis of Parental Questionnaire Data.

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		SP	DA	CON
SP	22	22 100%	0 0%	0 0%
DA	18	0 0%	17 94%	1 6%
CON	27	0 0%	0 0%	27 100%
PERCENTAGE CORRECTLY CLASSIFIED 98%				

Table (26)

GIRLS: Classificatory Analysis of Rutter Scales

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	17	9 (52.9%)	1 (5.9%)	7 (41.2%)
DA	42	7 (16.7%)	18 (42.9%)	17 (40.5%)
CON	101	10 (9.9%)	11 (10.9%)	80 (79.2%)
PERCENTAGE CORRECTLY CLASSIFIED 66.88%				

Table (27) presents the results of the Classificatory Analysis for boys on the Rutter Scale.

Table (27) BOYS: Classificatory Analysis of Rutter Scales

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	16	8 50%	3 19%	5 31%
DA	39	2 5%	24 62%	11 33%
CON	80	2 2%	15 19%	63 79%
PERCENTAGE CORRECTLY CLASSIFIED 70%				

Here again an impressive level of classificatory accuracy is achieved indicating that the groups created on the basis of the pupil questionnaire data have a more general validity.

The situation now seems to be that the hypothesized groups can be defined not only in terms of the pupil's own feelings and reactions to school but in terms of their parent's perceptions of them and of their teacher's views.

It may be argued that the parental and form teachers are basing some of their views on the child's actual level or perhaps pattern of attendance. That this is not so in any simple sense can be seen from Table (28). This table presents the results of a further Classificatory analysis following a Discriminant Function Analysis of pupil attendance data. These data were abstracted from the school registers over a randomly chosen 10 week period. Data are available only for boys and only on the AA, DA and CON groups.

Table (28) BOYS: Classification Analysis on Attendance Data

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	20	8 40%	8 40%	4 20%
DA	43	6 14%	30 70%	7 16%
CON	86	27 31%	33 38%	26 30%
PERCENTAGE CORRECTLY CLASSIFIED 43%				

The level of classificatory accuracy achieved is not very much above the chance level. It is therefore concluded that parental and teacher judgements must be based on much better information than basic attendance data.

SUMMARY

An attempt was made to produce a typology of school attendance anxieties involving four groups showing different patterns of anxiety in connection with school attendance and one group which is anxiety free. The findings reported here substantially validate this typology for both boys and girls. However only three groups are identified. There is firstly the Anxious Attender (AA) group. This is the group which is defined to be most like the School Phobic (SP) group in terms of questionnaire items relating to overt anxiety regarding school in that both SP's and AA's have generalised anxieties and psychosomatic symptoms regarding school. The AA group of boys is comprised of N=21 who represent 9% of the total number of boys in the sample. The AA girls comprise N=17 who represent 7% of the girls sample.

Secondly a group of Diffusely Anxious (DA) pupils is identified. This group is defined by the existence of general anxiety regarding school without any psychosomatic symptoms. Being more loosely defined it is somewhat larger and comprised N=44 boys (20% of the boys sample) and N=49 girls (19% of the girls sample).

Thirdly a group of anxiety free Controls (CON'S) is identified by the absence of either generalized anxiety regarding school or any psychosomatic symptoms. This group is comprised of N=88 boys (39% of the boys sample) and N=108 girls (41% of the girls sample).

The hypothesized fourth group of pupils displaying psychosomatic symptoms in the absence of generalized anxiety regarding school emerged as too small to warrant further analysis. This group consisted of only 4 boys (2% of the sample) and 9 girls (3% of the girls sample).

Use of the classification procedures following stepwise Discriminant Function Analysis indicated that these groups are not randomly produced artefacts of the group definitions but can be reliably and significantly discriminated on the basis of independent pupil variables ie those not used as part of the group definitions.

Further validation for the 'reality' of these groups is provided by the high rates of classificatory success achieved when discriminant analysis is applied to both parental and teacher data on the children. That school attendance data failed to discriminate significantly suggests that the parental and teacher judgements are not based on 'hard' behavioural data in the form of knowledge of the pupils actual rate of attendance but seems to relate to more subtle reflections of attitude and response.

DISCUSSION

Outside any discussion of the nature of the differences the fact that the hypothesized groups have been found to exist in the mainstream population is of considerable interest in itself. This is in line with that research showing an increased referral rate in the United States of America when a special clinic was set up (Waldfogel et al 1956). These workers report that the figures identified as school phobic more than tripled the average yearly number referred and they conclude that:

"It would seem then, that many of the cases of school phobia persist undetected by ordinary referral methods and untreated over long periods".

In Britain Shapiro and Jegede (1973) talk about 'formes frustes' which do not reach phobic proportions, and Hersov (1979) refers to 'the massive underlying reluctance to attend school of a large minority of children'. Heath (1982) uses the expression 'tip of the iceberg' in regard to his sample of school refusing phobics.

Particularly impressive is the validation of the 'separateness' of these groups using Rutter Scale data obtained from class teachers and of parental data on the pupils. The closeness of pupil questionnaire and Rutter scale data in the proportions correctly identified is striking at around 70% for both boys and girls. Even more striking is the high level of agreement on parent data.

However one must note here that the numbers involved in some of the groups are very small. This is particularly the case with the girls in the DA group where there are only 9 returned parental questionnaires. The parental questionnaires were sent by post to a random selection of the parents of the children in the mainstream sample. They were allocated a code number so did not have to give their name. The parents of the school phobics completed their questionnaires within the very different context of psychological service clinical involvement to help overcome an already diagnosed phobic reaction. They were thus demonstrably not anonymous.

Unfortunately data do not exist in sufficent quantity to permit valid analysis from the parents of the small Anxious Attender group. In all probability this is not a matter of differential return rates but rather is an artefact of the data collection procedure in which for logistical reasons the random sample of parental questionnaires had to be sent out before membership or even existence of the various sub-groups was known.

In general one of the problems in evaluating evidence about the existence of groups (or sub-groups) of non-attenders or of varying levels of anxiety relates to the fact that some widely used definitions of school phobia require an actual period of refusal or inability to attend school (Berg 1969). In his widely used definition he includes 'severe difficulty in attending school amounting to prolonged absence'.

A further difficulty emerges in terms of referral bias. Tyerman (1968) writing from a psychological perspective suggests a number of reasons for differential referral rates including quality of relation to specialist services of the referring sources, and known interest or competence in dealing with the problem. From a medical perspective Ryle (1963) indicates that referral rates among GP's varies by a factor of 10.

In the present study the pupils in the AA, DA and CON groups completed their questionnaire and other assessments as a part of a series of within-class exercises. They did not have volunteer status in the sense that their parents did. The School Phobics, who by definition were not attending school, completed their questionnaires much more privately. It may be that completing the questionnaires as part of a class group affected the manner in which they were completed and the degree to which the pupils believed they would be confidential.

If there were a problem in this area however it would be more likely to have the effect of decreasing rather than increasing self-disclosure regarding anxiety since there are no obvious advantages in reporting this when it is not true and potentially some disadvantages if other pupils or teachers found out about it.

What is clear from the above results is that there exists in our schools significant proportions of children who experience anxieties regarding attending school but who do not come to adult attention in the normal course of events. If we take the figures available for the child population 1982 in the peak age range for these problems of 10 to 14 years (NCB 1985) there would be over 175,000 AA boys and over 129,000 AA girls in England and Wales.

It may be that Dayton (1928) was right when he said, "In reality we know little of the mental sufferings of childhood. Even when confidence has been granted the child often lacks either the inclination or the language to tell us of the anguish he endures from the unfeeling trampling of that great power called pride....".

In this regard the numbers of anxiety free Controls is of interest. In this study only 40% of secondary age boys and 41% of secondary age girls are entirely free from either psychosomatic symptoms or general school anxieties.

It is surprising that anxiety free controls have not been used in previous research in this area. Much more common has been the use of control groups of 'Truants', 'Other Neurotic' or 'Normally Attending' pupils as controls - groups which might well, indeed would be likely to contain a proportion of AA's, DA's as well as anxiety free pupils.

The confirmation that these groups exist and have some validity external to the child him or herself justifies pursuing the issue of how these groups differ from each other and from clinically defined phobics.

Though the proportions of boys and girls in the AA, DA and CON groups do not differ significantly (Chi Sq. 1.38, df=2 p=.499) the decision has been taken to continue to analyse the data separately for boys and girls. The reasons for this decision are explored in the Research Design and Methodology section .

In the succeeding sections are explored some of the possible correlates and causes of anxiety in regard to school attendance. The high level of discriminant validity already determined for the typology indicates that exploring the differences between these groups and the phobic group may generate important ideas about why some pupils who appear to have an equivalent level of anxiety manage to sustain a good attendance and conversely may throw some light on the nature of the phobic reaction itself.

Chapter 7 ANXIETY REGARDING SCHOOL - correlates, conditions and possible causes.

Having determined the SP, AA, DA, and CON groups can be reliably discriminated from each other on the basis of data not involved in the group definitions and that this is possible with teacher and parent as well as pupil generated data one can begin the process of teasing out the correlates, facilitating or sensitizing conditions and possible causes of school related anxieties.

This task is here broken down via a series of analyses of the main differences among the groups. This is accomplished through the exploration of hypotheses generated on the basis of the researchers clinical experience augmented by a review of the pertinent literature.

The hypotheses investigated come within four headings:

Hypothesis 1 relates to the major demographic variables of age, intellectual ability and social class. The hypothesis is that there will be no significant differences among the groups on any of these variables.

Hypothesis 2 relates to the proneness of those with school anxieties to other fears. The hypothesis is that the groups will differ in terms of the number, type or range of other fears.

Hypothesis 3 relates to the nature and prevalence of interpersonal difficulties among pupils with anxieties in terms of school attendance. The hypothesis here is that the more anxious the pupil is in regard to school the greater will be the degree of interpersonal difficulties with his or her peers.

Hypothesis 4 relates to the nature and frequency of sleep difficulties among the anxious groups. Here the hypothesis is that the more anxious the pupil about school the greater the difficulties with sleeping, unwelcome reawakenings, and nightmares.

It is hoped that, by a series of contrasts and comparisons of pupils who range from clinically defined school phobics to those entirely free from anxiety in regard to school, that clues will become available as to the nature of the phobic reaction.

Given the decision to analyse data separately by sex of subject each hypothesis will be evaluated first for boys (who represent numerically the larger number of clinically defined school phobics in the present sample) and then for girls. Each hypothesis will be followed by a separate summary for boys and girls and a combined discussion section in which it is hoped to highlight any relevant aspects of sex differences. However the primary focus will remain on differences among the groups within each sex rather than between sexes.

HYPOTHESIS 1: Demographic Features

This hypothesis states that the 4 groups (SP's, AA's, DA's, CON's) will not differ in terms of mean age, ability level or social class for either boys or girls.

AGE - BOYS

Age was recorded in years and months and converted to decimial format for ease of analysis. Table (29) presents mean ages, standard deviations, standard errors and ranges for each of the four groups of boys.

Table (29) AGE: Means, Standard Deviations, Standard Errors and Ranges for BOYS.

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	RANGE IN YEARS
SP	30	12.91	1.24	.227	11.2 - 15.3
AA	21	13.95	1.13	.247	12.1 - 15.8
DA	44	14.57	1.35	.205	12.6 - 16.8
CON	88	14.49	1.32	.141	11.8 - 16.8

The above table clearly indicates a linear trend in age

among the boys with the SP's being the youngest, the AA's somewhat older and the DA's older still. That is to say that anxiety regarding school in its most acute form tends to be found in the younger age range.

It is interesting here to note however that the mean age of the anxiety free controls is remarkably close to that of the least acutely anxious of the three anxiety groups. It would seem from this that within the secondary school age range the variable of chronological age is potentially of considerable relevance especially among the younger age groups.

One must note here, however, that it is important not only to examine the upward trend in ages with decreasing anxiety regarding school but to investigate the significance of these differences. To this end One Way Analysis of Variance was employed. Table (30) presents the results of this analysis. The obtained F ratio of 12.8 with 3 degrees of freedom is highly significant ($p=0.0000$). It is clear that there exists very substantial statistical differences among these groups.

Table (30) One Way Analysis of Variance age by group-BOYS

ANALYSIS OF VARIANCE					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	64.6	21.53	12.81	0.0000
WITHIN GROUPS	179	300.83	1.68		
TOTAL	182	365.40			

This analysis confirms that there are highly significant differences between the group means. In order to help with the process of teasing out where the most important differences might lie a posteriori contrasts to compare all six possible pairs of group means among the four groups was undertaken. As group sizes are unequal Scheffe's Test was employed as this yields exact probabilities even under these conditions.

Table (31) 't' test comparisons among the six pairs of groups on the variable AGE - for BOYS

VAR	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
AGE												
N=	30	21	30	44	30	88	21	88	21	44	44	88
t=	-3.07		-.543		-.592		-.193		-.196		0.32	
df=	45.6		66.0		52.9		34.2		46.6		83.9	
p=	.004*		.000*		.000*		.062*		.056*		.749	

* significant at or beyond the .05 level

It can clearly be seen from the above that the null hypothesis that there are no differences among the groups in terms of age is rejected for this sample of boys. There are highly significant differences in mean age between SP's and each of the other groups. Also there are less dramatic but still trend defining differences between AA's and DA's and between AA's and CON's.

Since it is possible that chronological age may not have its impact in terms of years per se but in terms of peer groups the data were subjected to further analysis in terms of school year in which the children in the various groups were placed. It is a possibility that children who are older or younger than their age peers may have a sense of extra pressure. Table (32) presents the figures broken down by year.

Table (32) Group by school year distribution - BOYS

Group	1st yr	2nd yr	3rd yr	4th yr	5th yr
SP	13	5	6	3	3
N=30	43%	17%	20%	10%	10%
AA	6	4	7	3	1
N=21	28%	19%	33%	14%	5%
DA	7	12	5	10	10
N=44	16%	27%	12%	22%	22%
CON	14	13	26	12	17
N=82	16%	21%	30%	14%	19%

From the above table it can be seen that the first three years of secondary schooling accounts for 30% of SP's, 31% of AA's, 55% of DA's and 66% of CON's. Visual inspection therefore confirms that the two groups, who are by the definitions used in this study, the most anxious about attending school are strongly concentrated in the first two years of secondary schooling. Chi Sq evaluations of the significance of these percentages are presented overleaf.

Table (33) Significance of differences between proportions of pupils in each group who are in the first three years of secondary school - BOYS

Years	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
1,2	24	17	24	24	24	58	17	58	17	24	17	58
&3	80%	81%	80%	55%	80%	60%	81%	60%	81%	80%	81%	60%
4&	6	4	6	20	6	30	4	30	4	20	20	30
5	20%	19%	20%	45%	20%	40%	19%	40%	19%	45%	45%	40%
χ^2	.007		5.07		2.09		2.09		4.25		1.60	
df	1		1		1		1		1		1	
p	.932		.024*		.147		.147		.039*		.204	

* statistically significant at or above .05 level.

This further analysis confirms the previous finding namely that those pupils admitting to the greatest amount of school related anxiety are concentrated in the first three years. The proportions are remarkably similiar for the SP and AA groups who are in theory the most similiar. The proportions of DA and CON's in the first three years are also very close. However it is only the proportions of SP's and AA's in relation to DA's which reach statistical significance.

GIRLS

As with boys age was recorded in years and months and converted to decimal for ease of analysis.

Table (34) AGE: Means, Standard Deviations, Standard Errors and Ranges for GIRLS

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	RANGE IN YEARS
SP	19	13.41	1.81	.417	10.9 -15.8
AA	17	13.33	1.34	.325	11.4 -16.0
DA	49	14.6	1.46	.208	11.5 -16.8
CON	108	14.04	1.59	.153	11.3 -16.6

Unlike the boys where there was a fairly straightforward age trend among the more anxious groups the situation with the girls is less clear. Note however that the SP's and AA's are very close and that the DA's and CON's are also very close. Table (35) presents the results of a one way analysis of variance by age and group membership. The F ratio of 4.33 with 3df is significant at the .0056 level.

Table (35) One Way Analysis of Variance Age By Group for GIRLS

		ANALYSIS OF VARIANCE			
SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB
BETWEEN GROUPS	3	31.69	10.56	4.33	.0056
WITHIN GROUPS	189	461.11	2.24		
TOTAL	192	492.80			

In order to tease out where the significance lies a posteriori contrasts were undertaken to compare all six possible pairs of group means. As the groups are of unequal size Scheffes test is employed as this yields exact probabilities even under these conditions. Table (36) reports the results of this analysis.

Table (36) 't' test comparisons among the six pairs of groups on the variable Age - for GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
t	.142		-2.57		-1.42		-1.97		-3.29		2.19	
df	32.9		27.4		23.1		23.7		30.1		100.8	
P	.888		.016*		.168		.061		.003*		.031*	

* Significant at or beyond the .05 level

The null hypothesis that there are no significant age differences among the groups is rejected - as it was with the boys sample. Significant differences emerge between AP's and DA's, AA's and DA's, DA's and CON's. SP's do not differ significantly from AA's, nor AP's from CON's. There is a trend toward significance for AA's and CON's.

The possibility investigated with boys that school year rather than chronological age might be significant was also investigated for the girls sample.

Table (37). Group by school year - GIRLS.

Group	1st yr	2nd yr	3rd yr	4th yr	5th yr
SP	4	5	5	2	3
N=19	21%	26%	26%	10%	16%
AA	5	4	5	2	1
N=17	29%	23%	29%	12%	6%
DA	5	3	11	12	18
N=49	10%	6%	22%	24%	37%
CON	22	22	16	17	31
N=108	20%	20%	15%	16%	29%

It is clear from this table that the first three years of secondary schooling accounts for 80% of SP's, 81% AA's, 55% DA's and 60% of CON's. Chi Sq evaluations of the significance of these differences was undertaken and are reported below. Years one, two and three are combined in this analysis as are years 4 and 5.

Table (38) Significance of differences between the proportions of pupils in each group who are in their first three years of secondary - GIRLS

Years	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
1,2 & 3	14	14	14	19	14	60	14	60	14	19	19	60
	74%	82%	74%	39%	74%	55%	82%	55%	82%	39%	39%	55%
4& 5	5	3	5	30	5	48	3	48	3	30	30	48
	26%	18%	26%	61%	26%	45%	18%	45%	18%	61%	61%	45%
χ^2	.390		6.67		2.18		4.36		9.58		3.79	
df	1		1		1		1		1		1	
P	.532		.009*		.139		.036*		.0019*		.051*	

* significant at or beyond the .05 level

This analysis partially confirms the view that pupils admitting significant anxiety are overrepresented in the first three years of secondary school. Note however that the most significant differences were found among those actually attending school ie between the AA's and other groups. Though the direction was as predicted for SP's and CON's it is not statistically significant.

SUMMARY FOR BOYS

Hypothesis 1 relates to the prediction that SP's, AA's, DA's and CON's would not differ in terms of age, intelligence or social class. This summary relates to the age variable.

Against prediction a clear age trend was found among the groups admitting anxiety regarding school. The most severely anxious group (the SP's) were youngest, the next most anxious group (the AA's) were on average a year older and the next most anxious group (the DA's) were on average some 6 months older again. It is interesting to note that the anxiety free controls were closest in age to the DA's - being on average about a month younger.

Looked at in terms of school year groups about 80% of the SP and AA groups were in the first three years of secondary schooling. The significantly smaller proportions of 55% of DA's and 60% of CON's were in their first three years.

SUMMARY FOR GIRLS - AGE

The hypothesis that there are no age differences among the groups did not hold for girls either. SP and AA girls are very close in age the average age for SP girls being 13.41 years and for AA girls 13.33 years. SP girls proved to be significantly younger than DA girls whose average age is 14.6 years. AA's are also significantly younger than DA's. However SP's are not significantly different from CON's.

Evaluating the girls data by school year rather than chronological age indicates that 74% of SP's and 82% AA girls are in their first three years of secondary school. This is a significantly higher proportion than DA's at 39% but not from CON's at 55%. AA's differ significantly from both DA's and CON's.

DISCUSSION

The results reported here indicate that the null hypothesis of no age differences must be rejected. On the contrary there appears to be a significant age related component involving the most anxious boys - namely SP's - and AA's being younger with both DA's and CON's being somewhat older. The pattern with girls is less notable though age remains an important variable with both girl SP's and AA's being younger than DA's and CON's.

There is evidence that school phobia occurs across a very wide age range (Sperling 1961, Hersov 1960, Kennedy 1965). The present sample is restricted to the secondary age range. This is because in three years of data collection too few junior age school phobics emerged who fulfilled the strict criteria for inclusion employed by this study.

Though some work from the United States reports a peak incidence between 5 and 10 years (Goldberg 1953, Eisenberg 1958a, Glazer 1959) much of the most thorough British work (which generally involves larger samples) suggests an age peak between 11 and 13 or 14 years (Berg et al 1969, Baker and Wills 1978, Smith 1970).

Some writers have sugggested a bi-modal distribution (Smith 1970, Sangster 1971) while Hersov (1977) suggests three peaks - one when starting school, one when transferring to secondary school and a 14+ peak associated with more severe disorder. Hersov's suggestion would go some of the way towards resolving some of the disagreements in the published literature.

A further complicating factor here is that some workers have suggested that a proper understanding of these difficulties will come only when different sub-groups are considered. Berg et al (1969) distinguish between Acute and Chronic phobics. Their Chronic group is younger. Baker and Wills (1978) also found age peaks but in their Acute group rather than in their Chronic group.

In the present sample of SP's the mean age of boys is 12.9 years (range 11.2 to 15.3 years) and for girls 13.41 (range 10.9 to 15.3 years). This is not very dissimilar to other recent work eg Blagg 1979 who found a mean age of 13.36 at treatment (range 9 to 16 years N=70) and Heath (1983) who found a mean age among his N= 15 phobic girls of 13.41 and of 13.27 among his N=26 phobic boys.

It must be noted however that the peak in the present study is somewhat older that that reported by Hersov (1960) whose phobic group had a mean age of 11.8 years though the range of his sample was rather larger than the above covering a 9 year period from 7 to 16 years. 8 of his sample (16%) were between 7 and 9 years and this will have tended to lower the average age.

Merely enumerating research work which reports differing age peaks however does not specially help to understand why they occur. Why should school related anxieties be at a peak in the first three years of secondary schooling? Clearly the transfer to secondary school itself with its greater complexity of organization and new social, cognitive, and disciplinary demands causes many children anxiety (Measor and Woods 1984).

However if secondary transfer were the only explanation we would expect the vast majority of cases to be present in the first year of the secondary school. This proved to be the case in fewer than half of the present sample of SP boys and in only one fifth of SP girls. It is also the case in less than a third of AA's with both boys and girls.

It is worth commenting here on the sex distribution in the present sample. When the SP, AA, DA and CON groups are examined in terms of the proportions of boys and girls in the first three years of secondary school the differences do not approach statistical significance (Chi Sq. 2.43 df 3 p=.486). The total numbers in the present sample are rather small when broken down by school year and thus the results must be treated circumspectly.

Might it be that some anxious first years sustain an attendance because they lack the confidence or other resources to transmute their negative feelings into actual non-attendance. Heath (1983) introduces the possibility that parental effectiveness in getting the anxious child to school may also be important.

Besides the demands of the new and more taxing level of schooling many of the pupils in this age group are entering puberty and are coming to terms with the complex physical changes occurring to them. It is generally accepted that girls reach puberty and mature emotionally somewhat earlier than boys and this may play a part in the different constellation of symptoms found in anxious girls.

It is plausible that as pupils get older that they adjust to these changes and acquire a larger number of strategies for dealing with life stresses. However personal clinical experience suggests as many early as late developers among school phobic children. The important thing may prove to be not whether the arrival of puberty is early or late but how different it is perceived to be from immediate peers. School phobic pupils who, by the stringent criteria used in this study, are those whose anxiety is so great that they have been unable to attend school have removed themselves from the opportunity to learn how to cope.

Furthermore in interpreting the significance of age as a variable, factors besides secondary transfer and the biological impact of puberty need to be considered.

Children in this general age range are also in a phase of acquiring qualitatively different cognitive skills. In Piagetian terms tney are entering or consolidating the stage of formal operational thinking (Inhelder and Piaget 1958). This, it is argued, introduces a greater cognitive flexibility. During this period pupils become better able to follow logical propositions and develop an increased facility for considering hypothetical constructs. This leads to an enriched capacity to envisage future events etc. Partly as a consequence of this it is during this period that children come to have a fuller conceptual knowledge of death as an inevitable and irreversible event. Yule (1969) raises the possibility of the role of the concept of death among school phobic 10 to 13 year olds.

Another aspect of this is that there may be a change in the childs location in the intellectual hierachy. It may be that some pupils in the early days of their secondary experience can respond well at the concrete operational level but have less facility at the formal operational level. This may cause distress for some.

Differential rates of progress for boys and girls are reported in some curriculum related areas eg boys make more rapid progress in mathematics between age 11 and 18 while girls demonstrate greater verbal reasoning ability (Maccoby and Jacklin 1980). It is improbable that such differences are helpful here since the overlap between the groups in sex difference research is considerable.

Finally it is relevant to point out that the nature of friendship and general peer relations changes with increasing age so that by early adolescence a move has occurred (or is taking place) towards the Emphatic Stage which involves more self disclosure and shared confidences (Bigelow 1977). In general childrens conceptions of friendship become more complex and well differentiated as they move into adolescence (Hartup 1975). This may bring a variety of problems in its train for some children. Hypothesis 3 explores this issue in greater detail.

It is clear that the whole question of the significance of the age variable is complex and enmeshed with a variety of developmental and clinical issues. The present data do not permit the resolution of these questions. We should bear in mind the stricture that the symptom of school phobia cannot be evaluated apart from age of child (Milman 1961).

HYPOTHESIS 1

IQ

Ability was assessed in the present study using the Ravens Progressive Matrices - a non-verbal measure. The test was administered individually with the SP group and on a group basis with the mainstream school-attending pupils before they were separated into the AA, DA and CON groupings. Table (39) presents an overview of the findings for boys.

Table (39) IQ: Means, Standard Deviations, Standard Errors, and Ranges - BOYS

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	RANGE IN IQ POINTS
SP	30	102.9	13.65	2.49	76 - 146
AA	21	109.4	8.88	1.94	88 - 125
DA	44	113.7	13.37	2.01	88 - 139
CON	88	111.9	13.10	1.41	86 - 137

This table indicates a linear trend in the ability levels as assessed by this test. The most anxious group namely the SP's score lower than the next most anxious group the AA's who in turn score lower than the DA's. The CON group occupy an intermediate position.

This difference in mean ability level also finds reflection in the difference in ranges. The Scheffe Multiple Range test reveals that the range of scores for the SP group is significantly greater (.05 level) than the DA and CON groups but not significantly greater than the AA group.

Having determined that there is a an ability trend it is important to evaluate the significance of the differences found. Table (40) presents the results of a One Way Analysis of Variance. The obtained F ratio of 4.791 with 3 degrees of freedom is significant (p=.003).

Table (40) One way Analysis of Variance IQ by Group

ANALYSIS OF VARIANCE					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	2377.5	792.5	4.791	0.0031
WITHIN GROUPS	177	29276.8	165.4		
TOTAL	180	31654.3			

Since a highly significant between-groups difference was identified a posteriori contrasts to compare all six combinations of groups was undertaken. Due to the unequal group sizes Scheffe's test was employed. The results are presented in table (41).

Table (41) 't' test comparisons among the six pairs of groups on the variable IQ.

VAR IQ	SP AA	SP DA	SP CON	AA CON	AA DA	DA CON
N=	30 21	30 44	30 88	21 88	21 44	44 44
t=	-2.67	-3.36	-3.15	-1.04	-1.52	0.71
df=	48.3	61.6	48.9	44.0	56.2	85.2
p=	.044*	.001*	.003*	.303	.134	.479

* significant at or beyond .05 level.

Table (41) reveals significant differences between SP and the AA, DA and CON groups. Interestingly there are no significant differences among the other groups in respect of mean levels of IQ.

SUMMARY OF RESULTS - BOYS

A linear trend of increasing IQ level with decreasing anxiety was found. The SP group, which is here regarded as the most anxious group, had the lowest mean IQ score though still very much within the normal range. The AA group had a numerically small but statistically significant 6 point advantage over the SP group. The SP group differed by 11 IQ points from the DA group. This proved to be highly significant - at least in statistical terms. The SP group also significantly differed from the CON group by 9 IQ points.

GIRLS - IQ

As with boys ability was sampled using the Ravens progressive matrices - completed on a group basis in school for the mainstream pupils before separation into AA,DA and CON groups. The SP girls had their test administered as part of their clinical evaluation. An overview of the results is presented in table (42).

Table (42) IQ: Means, Standard deviations, Standard Errors and Ranges for GIRLS

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	RANGE IN IQ POINTS
SP	19	96.31	15.64	3.58	73 - 127
AA	13	102.46	10.00	2.77	84 - 112
DA	42	110.45	11.15	1.72	86 - 130
CON	88	110.75	14.46	1.54	74 - 137

Visual inspection indicates that the two most anxious groups namely the SP's and AA's produce lower scores. Note however that the 54 point range in ability scores among SP's is very high. Use of the Scheffe Multiple Range test reveals that the range of scores for the SP group is significantly greater (.05 level) than DA's and CON's.

One Way Analysis of Variance is used here to evaluate how statistically significant are the mean differences among the groups. The results are presented in table (43).

Table (43) One Way Analysis of Variance IQ by Group - GIRLS

	ANALYSIS OF VARIANCE				
SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	3894.85	1298.28	7.096	.0002
WITHIN GROUPS	158	28906.0	182.94		
TOTAL	161	32800.9			

It is clear that highly significant differences exist among the groups involved on this variable. These differences were further investigated by means of a posteriori contrasts to compare the 6 possible combinations among the 4 group means using Scheffes test.

Table (44) 't' test comparisons among the 6 pairs of groups on the variable IQ

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	13	19	42	19	88	13	88	13	42	42	88
t	-.1355		-3.553		-3.696		-2.611		-2.447		-.129	
df	29.9		26.6		25.1		20.3		22.0		102.2	
p	.186		.001*		.001*		.017*		.023*		.893	

*significant at or beyond .05 level

SUMMARY FOR GIRLS

The most anxious of the girls groups viz SP's and AA's produced the lowest ability scores on this instrument. The SP group differed significantly in range from DA's and CON's.

The differences between SP's and DA's, SP's and CON's, AA's and CON's and AA's and DA's are all statistically significant at or beyond the .01 level.

DISCUSSION (BOYS AND GIRLS)

Much of the early work on school phobia reported the ability levels of phobics as average or above average (Johnson et al 1941, Eisenberg 1958 a and b, Rodriguez et al 1959, Hersov 1960, Levanthal and Sills 1964). A few papers reported a proportion of phobics with below average ability (Nursten 1958, Chazan 1962).

Assessment of ability has involved both subjective evaluations and the use of norm-referenced tests. Where the latter have been used they have relied rather heavily on verbal measures. This presumably is also an important aspect of the assessment when the judgements are subjective and may have a bearing on some of the research findings especially since good verbal skills are more likely to be educationally highly visible.

In one of the few studies specifically designed to evaluate the issue of ability in relation to school phobia Hampe et al (1973) used a standardized, individually administered scale with both verbal and non-verbal components. They conclude that the ability of school phobics is normally distributed.

The sample of school phobics in the present study is not very dissimilar in respect of ability from other published work in Britain. Heath (1983) used a verbal measure of ability and reports that the mean IQ for his phobic group is 99.96 (SD 18.65) for boy phobics and 99.93(SD 18.52) for his girl phobics. Hersov (1960) found a mean IQ of 106.4 (SD 13.7) and Blagg (1979) reported a mean of 96.7 for his phobic group.

One must note that in the present samples of both girls and boys there is a positive correlation between age and IQ. In the case of both boys and girls this is at the .000 level of significance (Boys N= 219, r=.36 and Girls N=213, r=.234). It would seem that age accounts for some 13% of IQ variance with boys and 5% variance with girls on this measure. Although a consideration of sex differences did not explicitly enter into the construction of Ravens Matrices the more general finding is that it does not significantly favour either sex (Court and Kennedy (1976). The present small correlations may be an artefact of this particular study.

Although the subjects in this study were not asked directly to rate their own abilities they were asked to express a view as to how satisfied they feel they are with the standard of their own work in school. V13 (pupil questionnaire item 6) asked the pupils to agree or disagree on a 5 point scale with the comment 'I am usually satisfied with the standard of my own work in school'. Data exist for all groups.

Among SP boys there is no significant correlation between IQ and variable 13 (N=30, r=.129 p=.247) whereas there is a significant correlation among SP girls (N=19, r=.469, p=.021). There is a general trend toward significance for girls (among AA's,N=11, r=.439, p=.088, DA's N=42, r=.233, p=.069 and CON's N=88, r=.149, p=.082)

With AA boys the correlation is non significant but interestingly in a negative direction (N=20, r=-.145, p=.265) while with DA's it approaches significance (N=44, r=.245, p=.054) and with CON's achieves statistical significance at a good level (N=84, r=.284, p=.004).

We might speculate that among boys the absence of anxieties about school permits them to make a more reality based judgement about their own mental abilities. We cannot say at this stage whether the absence of school related anxieties gives unimpaired (or less impaired) access to ability with consequent greater satisfaction with school work or whether getting greater satisfaction helps make boys less anxious in general regarding school.

It is important to be cautious not to overinterpret such data. Firstly we are dealing with correlations not causal mechanisms - as Thurstone put it a correlation is a confession of ignorance. Secondly the majority of correlations here are in fact small accounting for only a tiny proportion of the variance and thirdly they relate to how the pupils feel about their standard of work not their ability as such.

The null hypothesis that there are no ability differences among the SP, AA, DA and CON groups is rejected for both boys or girls. Numerically small but statistically significant differences are found for boys between the SP's and each of the other groups. However the AA's, DA's and CON groups do not differ significantly from one another.

With girls the pattern of significant correlations is different. Such differences are found between the SP's and DA's and SP's and CON's but not between SP's and AA's. Among girls significant differences were also found between AA's and DA's and AA's and CON's.

The implication of the above is that the variable of ability like that of chronological age is one toward which clinical and research workers should remain watchful. More detailed work is needed to evaluate how numerically relatively small differences in ability transmutes into academic effects and impinge on actual performance.

SOCIAL CLASS

In the present study Social Class was based on father's occupational status using the Registrar Generals Classification of Occupations (1966). Unfortunately data on social class are not uniformly available due to differential return rates of parental questionnaire. Data are however available in sufficient volume to permit analysis on the SP, DA and CON boys.

Table (45) Chi Square Analysis of Social Class - Boys

	SP	DA	SP	CON	DA	CON
N=	30	18	30	30	18	30
Professional	5	2	5	4	2	4
	17%	11%	17%	13%	11%	13%
Intermediate	8	9	8	11	9	11
	27%	50%	27%	37%	50%	37%
Skilled	13	7	13	11	7	11
	43%	39%	43%	37%	39%	37%
Partly Skilled	3	0	3	4	0	4
	10%	0%	10%	13%	0%	13%
Unskilled	1	0	1	0	0	0
	3%	0%	3%	0%	0%	0%
χ^2	4.42		1.89		2.93	
df	4		4		3	
p	.352		.755		.401	

It can be seen from this table that, though the population in the present sample may not reflect the national distribution of social class, there are no significant differences overall among the groups within the sample.

Inevitably the question arises as to whether the present sample differs from other samples of school phobics in respect to this variable. Heath (1983) undertook an elaborate comparability exercise to investigate whether his sample of phobics differed from other published British work in this respect. He concluded that his sample did not differ significantly.

Table (46) reports a chi square comparison of the present distribution of social class within the school phobic group and Heath's sample.

Table (46) Comparison present sample with Heath's sample.

	Social Class					
	N	1	2	3	4	5
Present Sample	30	5 17%	8 27%	13 43%	3 10%	1 3%
Heath's Sample	39	2 5%	8 21%	13 33%	9 23%	7 18%
χ^2	7.74					
df	4					
p	.101					

Since no significant differences are found here we may conclude that the present sample of school phobic boys is not radically different in respect of social class as measured by father's occupation from other published data within the British context.

Another means available from the present data to investigate the social class dimension is to examine the variable of family size. Table (47) presents data of family size for the groups on which it is available.

Table (47) 't' test comparisons for the variable family size among SP's, DA's and CON's

	SP	CON	SP	DA	DA	CON
N=	30	30	30	18	18	30
$\bar{X}$ Family Size	4.0	3.4	4.0	3.4	3.4	3.4
SD	2.3	1.3	2.3	1.6	1.3	1.3
SE	.41	.24	.41	.38	.38	.24
t	1.38		1.05		.05	
df	46.58		46.0		46.0	
p	.173		.300		.959	

It is clear from this analysis that family size does not differ significantly among the three groups on which data are available.

The present findings are also within reasonable range of mean family sizes presented in other British work. Heath (1983) gives the mean family size of his phobic sample as 2.9, Hersov (1960) finds 2.3, Berg et al (1972) quotes 2.9, while Blagg (1979) indicates his mean family size to be 3.01.

In interpreting such data one must remember that, by and large, families of older children have been together longer and so the chances of having a larger family size is increased. Studies with a significant number of younger first born children will tend to lower the mean family size.

SUMMARY OF RESULTS - BOYS

The present findings lead to an acceptance of the null hypothesis that no social class differences will be found among the groups under study. Available data on the SP, DA, and CON groups indicated that these groups do not differ overall in terms of fathers occupation.

The issue of family size was also considered. No difference in the mean number of children among the groups was found. Present data on both father's occupation and family size is largely in accord with other recently published British work.

SOCIAL CLASS - GIRLS

Father's occupation was again used as the primary means of defining social class. Unfortunately in the case of AA girls parental questionnaire data is available in only two cases and of DA's in only 9 cases. These numbers are clearly too small for meaningful analysis. Thus the present discussion will be restricted to the SP and CON groups.

Table (48) Social Class by group GIRLS

	SOCIAL CLASS	
	SP	CON
N=	19	25
Professional	0 0%	6 24%
Intermediate	9 47%	11 44%
Skilled	8 42%	7 28%
Partly skilled	2 10%	1 4%
Unskilled	0 0%	0 0%
χ^2	5.89	
df	3	
p	.117	

It is clear from this table that at least as far as SP and CON girls are concerned social class does not appear to be an important variable. In order to investigate if the social class distribution for boys and girls differed a further analysis was undertaken looking separately at the SP and CON boys compared with girls.

Table (49) Social Class Distribution by sex for SP's.

	Social Class				
SP's	1	2	3	4	5
Girls	0 0%	9 47%	8 42%	2 10%	0 0%
Boys	5 17%	8 27%	13 43%	3 10%	1 3%
χ^2	5.2				
df	4				
p	.9949				

It would appear then that for SP's there is no difference in the social class distribution. Given that boy phobics did not differ from previous work in regard to social class it seems reasonable to proceed on the assumption that this is not a relevant dimension for the present sample.

Table (50) Social Class Distribution by Sex for CON's.

CON's	Social Class				
	1	2	3	4	5
Girls	6	11	7	1	0
	24%	44%	28%	4%	0%
Boys	4	11	11	4	0
	13%	37%	37%	13%	0%
χ^2	2.6				
df	3				
p	.447				

It is evident from this table that there are no significant differences between boys and girls in the distribution of social class for CON's in the present sample. Unfortunately data are not available for AA's and DA's.

However data exist in sufficient quantity to permit analysis on family size for SP's, DA's and CON's. It must be said however that there are data on only 9 families among the DA's. It was none the less felt that this would be a viable number. Thus it was decided to to include this group in the analysis.

Table (51) 't' test comparisons for family size -GIRLS

	SP	CON	SP	DA	DA	CON
N	19	25	19	9	9	25
$\bar{X}$ Family size	4.3	4.0	4.3	4.7	4.7	4.0
SD	1.82	1.44	1.82	2.0	2.0	1.44
SE	.419	.289	.419	.683	.683	.289
t	.62		-.58		1.05	
df	33.47		14.27		11.0	
p	.539		.573		.317	

Once again no significant differences were found on the variable family size.

SUMMARY OF RESULTS - GIRLS

The present data for girls leads to an acceptance of the null hypothesis that no social class differences will be found among the groups under study. Available data on SP's and CON's indicate that these groups do not differ in terms of social class as defined by father's occupation.

When considered in terms of family size data were available for SP's, DA's and CON's. No significance was found in the mean number of children among the groups.

DISCUSSION BOYS AND GIRLS

A considerable amount of evidence exists linking social class and general truancy. Reid (1980) provides a detailed and helpful review of this literature. In general it is found that average school attendance decreases as family size increases (Brooks et al 1962). Fogelman and Richardson (1974) point out that poor attendance is 2 to 3 times higher among pupils whose fathers are in manual occupations.

Heath (1983) argues that no sample of school phobics can be regarded as truly random. His comparability exercise however permits the assertion that at least in mainstream British research that social class is not a very significant factor in regard to school phobia. Certainly the various samples do not seem to differ very dramatically from each other in this regard.

Viewing the present findings from the perspective of this comparability study indicates that the present sample of school phobics does not differ in respect of fathers occupation from previous work. However it looks as though the mean family size of 4 for the SP boys and SP and CON girls is larger than that normally produced. Heath (1983) gives the mean family size of his phobic sample as 2.9, while Blagg (1979) indicates his mean family size to be 3.01.

In interpreting such data one must remember that, by and large, families of older children have been together longer and so the chances of having a larger family size is increased. Studies with a significant number of younger first born children will tend to lower the mean family size.

Furthermore it should be noted that some workers have pointed to the need to consider various sub-groupings of school phobics when investigating the social class variable. Baker and Wills (1978) found a different distribution by social class when they looked at their Chronic/Acute dichotomy. When they looked at social class 5 on its own they found more Chronic than Acute phobics.

It is, in a sense, surprising that social class differences have not more solidly emerged from the school phobia literature. Angelino et al (1956) investigating a very large sample (N=1100) found socioeconomic status affected the type and frequency of childrens fears in general and Dunn (1963) looking specifically at school related anxieties found social class differences. Lower class pupils were found to have higher school anxiety than middle class pupils among younger children but not to the same extent in adolescence.

Very few workers seem to have examined the factor of awareness of social class membership as a direct source of anxiety. As long ago as 1940 Pinter and Lev commented that class in itself is seldom a reported cause of anxiety. Presumably class would impact more on a child who found him or herself being the only one (or one of a very small group) from a particular social class background within a school.

Part of the interpretive difficulty resides in the fact that many potentially significant factors are independently linked to occupational status. Galloway (1980) reminds us that family size, greater maternal age, fewer maternal separations etc are in this category.

Family size too has a chequered history as a variable in school phobia literature. Some reviewers do not mention it at all (Frick 1964, Kelly 1973), while other workers such as Hersov (1960) found his truant group (mean family size 3.4) to be significantly larger than either his school phobic or his control groups (mean family size 2.3). However Berg et al (1972) look at the family size variable from the perspective of what is for school phobia research a very large sample of 100, which they compare with a non phobic 'patient group' and a control group. The phobics (mean family size 2.93) did not significantly differ from the Controls (mean family size 2.64) though this significantly differed from the mean family size of 3.27 for their non phobic patient group at the .05 level.

A further interesting angle on this problem is provided by Tibbenham (1977). He links overcrowding to truancy but demonstrates that, in his work, this is not related to social class. The implication here is that the stress of living in overcrowded conditionsis the mechanism which is operative. Hypothesis 4 in the present study examines sleeping problems and identifies sharing a room as disproportionately common among the SP group.

Outside some such explanation it is difficult to see how differences sometimes determined in fractions of a child would make a dramatic difference. What seems not to have been considered to any great extent in the school phobia research (including the present study) are variables such as sex of siblings, quality of relationship, age gaps etc.

However from the point of view of the present study neither social class defined by fathers occupation nor family size proves to be statistically significant. One must be sensitive to the general issue of sample size. Data are available on too few pupils in the DA and AA groups to permit very meaningful analysis. However the comparability exercise lends an extra degree of confidence in that the SP and CON samples are seen not to differ in respect of social class from other recent British work for either boys or girls.

HYPTOHESIS 2 - Other Fears

This hypothesis states that the SP, AA, DA, and CON groups will differ in terms of the number and nature of fears other than school related anxieties. It is predicted that more anxious groups will report more fears and that the focus of these fears will differ across groups.

Variables 58 to 66 (pupil questionnaire item 37) elicit information about fears from the pupils own perceptions.

BOYS

In order to give some perspective on the general issue of fears table (52) reports the overall incidence of fears among the 225 boys in the sample.

Table (52) Fears admitted by boys. (N=225)

	N	%
INSECTS	25	11%
DARKNESS	30	13%
ENCLOSED SPACES	39	17%
ANIMALS	5	2%
GOING OUT	3	1.3%
WATER	15	6.7%
HEIGHTS	67	29.8%
OPEN SPACES	0	0%
OTHER	26	11.6%

Hypothesis 2 was investigated first in relation to the proportion of subjects reporting one or more fears. Table (53) presents the results of a Chi Square analysis.

Table (53) Proportions of boys reporting one or more fears.

	SP	CON	AA	DA
N=	30	88	21	44
FEARS	17 (57%)	50 (57%)	11 (52%)	31 (70%)
NO FEARS	13 (43%)	33 (43%)	10 (48%)	13 (30%)
χ^2	2.7			
df	3			
p	.438			

It is clear that the hypothesis that the 4 groups will differ in terms of the proportion admitting fears is not confirmed. It may well be however that differences exist either in terms of the number or content (focus) of fears.

A new variable FEARS was created. This is a simple count of the number of separate fears reported by each subject. 't' test comparisons were undertaken to evaluate whether the mean number of fears reported by each group differed from each other. Table (54) reports the result of this analysis.

Table (54) 't' test comparisons mean number of FEARS reported by SP's, AA's, DA's and CON's.

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	83	21	83	21	44	44	83
$\bar{X}$	1.2	.95	1.2	.93	1.2	.92	.95	.92	.95	.93	.93	.92
SD	1.5	1.1	1.5	.93	1.5	.97	1.1	.97	1.1	.93	.93	.97
t	.60		.63		1.04		.12		-.09		.33	
df	48.87		72		115		28.40		34.79		89.94	
p	.54		.498		.299		.9		.92		.74	

Both visual inspection and statistical analysis indicate that for this sample there are no significant differences in the average number of fears reported by the four groups. The expectation that those pupils admitting to higher levels of within school anxiety would be prone to other fears is therefore not borne out.

It may be however that, though neither the proportion of pupils in the groups admitting fears nor the average number of fears differ, that these groups differ in the nature or focus of their fears.

To investigate this possibility separate Chi Square Analyses of the proportion reporting each fear were undertaken. The results are tabulated in Appendix (31).

Examination of this appendix reveals that there are statistically significant differences only on 3 fears namely INSECTS, DARKNESS and GOING OUT. Note however that the findings are not systematic and in some cases are against the intuitively predicted direction.

One might reasonably have assumed that more DA's than CON'S would report fears. DA's and CON's do in fact differ significantly from one another in terms of fear of INSECTS. However no DA's report fear of insects whereas 16 (18%) of CON's do.

In the case of DARKNESS the only difference to reach statistical significance is also between DA's and CON's though here the difference is more in the predicted direction with 11 (25%) of DA's and only 5 (6%) of CON's reporting this fear. The situation in terms of GOING OUT is much more in line with prediction. 5 (17%) of SP'S report this fear whereas no CON or DA reports this at all.

It is of interest to view Fears not only from the child's own perspective but from the parental aspect. Data are available for N=30 SP's, N=18 DA's and N=30 CON's.

Table (55) Parental report of childrens fears - BOYS

FEAR	SP	CON	SP	DA	DA	CON
N=	30	30	30	18	18	30
Insects	0(0%)	1(3%)	0(0%)	1(6%)	1(6%)	1(3%)
χ^2	1.01		1.7		.139	
df	1		1		1	
p	.313		.192		.709	
Darkness	9(30%)	1(3%)	9(30%)	1(6%)	1(6%)	1(3%)
χ^2	7.63		4.07		.139	
df	1		1		1	
p	.005*		.043*		.709	
Enclosed spaces	0(0%)	0(0%)	0.(0%)	1(6%)	1(6%)	0(0%)
χ^2	-		1.7		1.7	
df	-		1		1	
p	-		.192		.192	
Animals	0(0%)	1(3%)	0(0%)	0(0%)	0(0%)	1(3%)
χ^2	1.01		-		.612	
df	1		-		1	
p	.313		-		.433	
Going Out	4(13%)	1(3%)	4(13%)	0(0%)	0(0%)	1(3%)
χ^2	1.96		2.6		.612	
df	1		1		1	
p	.161		.105		.433	
Water	3(10%)	0(0%)	3(10%)	1(6%)	1(6%)	0(0%)
χ^2	3.35		.290		1.7	
df	1		1		1	
p	.075		.539		.192	
Heights	3(10%)	1(3%)	3(10%)	2(11%)	0(0%)	0(0%)
χ^2	.350		.023		.139	
df	1		1		1	
p	.553		.877		.709	
Other fears	2(7%)	1(3%)	2(7%)	1(6%)	1(6%)	1(3%)
χ^2	.350		.023		.139	
df	1		1		1	
p	.553		.877		.709	

NB OPEN SPACES omitted as no parent in any group reported that their child had a fear in this area.

These results indicate that it is only on fear of DARKNESS that statistically significant differences are found among these groups. Here the differences are between the SP's and each of the other groups upon whom these data are available. The parents of 30% of SP'S report fear of the dark in the child whereas only 3% of parents of CON's and 6% of DA's report this. There is also a trend toward significance for fear of Water. Parents of 10% of SP's report the presence of this fear in their children but none of the parents of CON's.

Additionally the question of the importance of other fears was investigated as part of a wider Discriminant Function Analysis. The presence or absence of each fear was entered (among other variables) in a Discriminant Analysis using pupil questionnaire data. A Discriminant Function is a linear combination of variables. A variable which may seem to lack importance when looked at in isolation may have a potency in weighted combination with other variables. Appendix (7) reports the Standardized Discriminant Function coefficients.

Fear of insects, fear of the dark, fear of going out and 'other fears' emerge as significant. Fear of insects and fear of the dark load on Function 1 which accounts for 50% of the variance. Fear of going out loads on Function 2 which accounts for almost 38% of the variance and 'Other fears' on Function 3 which accounts for 11% of the variance.

It is perfectly possible that while neither type nor incidence of fears is significant in a general sense that the 4 groups could differ in terms of their self-perceived seriousness of any reported fears. Pupil questionniare item 38 (Variable 67) asks 'How serious is the problem of these special fears for you'. Thus pupils are called upon to make a personal judgement.

Table (56) Seriousness of fears - BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	17	11	17	31	17	54	11	54	11	31	31	54
SERIOUS	8	5	8	17	8	30	5	30	5	30	17	30
	47%	45%	47%	55%	47%	55%	45%	55%	45%	55%	55%	55%
NOT SURE	4	5	4	8	4	14	5	14	5	8	8	14
	23%	45%	23%	26%	23%	26%	45%	26%	45%	26%	26%	26%
NOT SERIOUS	5	1	5	6	5	10	1	10	1	6	6	10
	29%	9%	29%	19%	29%	18%	9%	18%	9%	19%	19%	18%
χ^2	2.2		.634		.929		1.8		1.66		.009	
df	2		2		2		2		2		2	
p	.318		.727		.628		.397		.435		.995	

The above table clearly reveals that none of the groups differs signifiantly from any other group in terms of self perceived seriousness of fears. One might have expected those pupils who are more anxious about school to be more prone generally to evaluating all other fears as serious. This however seems not be so in practice. This suggests thought given to each item rather than general responding with a 'set' for over-judging seriousness.

SUMMARY BOYS

The hypothesis that the 4 groups under investigation would differ in terms of the co-occurrence of other fears with the most anxious groups being most prone to other fears is not confirmed. No differences were found in the proportion of SP's, AA's, DA's and CON's who report having other fears. Nor is there any difference in the mean number of fears reported.

The question of whether any particular fears are over-represented within groups produced a small number of significant findings with DA pupils reporting a significantly lower level of fear of INSECTS than CON's but a significantly higher incidence of fear of DARKNESS. SP's were found to be over-represented in the fear of GOING OUT category when compared with DA's and CON's. No other fears were found to be relevant in any of the analyses.

Parent data of pupils fears revealed only fear of DARKNESS as significant between CON's and DA's. Furthermore discriminant analysis permits the inclusion of fear of INSECTS, the DARK and GOING OUT, with an appropriate weighting.

GIRLS

The table below presents the results for the overall incidence of fears among the 262 girls in the sample.

Table (57) Fears admitted by GIRLS

	N	%
INSECTS	108	41%
DARKNESS	87	33%
ENCLOSED SPACES	48	18%
ANIMALS	12	4.5%
GOING OUT	9	3.4%
WATER	18	7%
HEIGHTS	79	30%
OPEN SPACES	5	2%
OTHER	37	14%

As with boys Hypothesis 2 for girls is investigated firstly in relation to the proportion of subjects reporting one or more of the above listed fears. The expectation is that those pupils who are in general more anxious about school will have (or admit) a higher proportion of fears. Thus SP's should have the highest proportion, AA's next highest, DA's next and CON's least.

Table (58) Proportions of girls reporting one or more fears

	SP	CON	AA	DA
N=	19	108	17	49
FEARS	14 (74%)	74 (69%)	16 (94%)	33 (67%)
NO FEARS	5 (26%)	34 (31%)	1 (6%)	16 (33%)
χ^2	5.117			
df	3			
p	.163			

It is evident that the hypothesis that the 4 groups will differ in terms of the proportion admitting fears is not confirmed. However as with boys a new variable FEARS was created as a simple count of the number of separate fears reported by each subject. The group differences in the mean number of fears were evaluated by means of 't' tests.

Table (59) Comparison of mean number of FEARS by group

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
$\bar{X}$	1.7	1.6	1.7	1.6	1.7	1.4	1.6	1.4	1.6	1.6	1.6	1.4
sd	1.5	1.0	1.5	1.0	1.5	1.2	1.0	1.2	1.0	1.0	1.0	1.2
t	.35		.45		.94		.70		.06		.91	
df	35.76		25.17		22.55		24.26		28.83		103.55	
p	.72		.66		.36		.48		.95		.36	

It is clear that there are no differences which even approach statistical significance in the average number of fears reported by the four groups. Hypothesis 2 is not confirmed for girls in this respect.

As with boys this is further investigated for the girls sample in terms of each fear separately. Though neither the proportion of pupils admitting fears, nor the mean number of fears reported differ significantly there is the possibility that more anxious pupils regarding school attendance are prone to particular fears. A separate Chi Square analysis of the proportion reporting each fear was undertaken. Appendix (32) tabulates these results.

Examination of this appendix reveals that there are statistically significant differences only on INSECTS, GOING OUT, WATER and a trend on DARKNESS. Note that the findings are not in the predicted direction of the more anxious children reporting more fears.

Within the DA group 55% report a fear of INSECTS. This differs significantly from the 26% SP's so reporting, and from 18% AA's and 33% CON's . This almost reverses the predicted direction. Fear of GOING OUT is more in accord with prediction with the 26% of SP's who report this differing significantly from the 6% DA's and 2% CON's. In the case of WATER 18% of AA's admit this fear which differs from the 4% of DA's and CON's who report it. There is a trend in the case of DARKNESS with 47% SP's and AA's reporting this as opposed to 25% of DA's.

The issue of FEARS can also be investigated in terms of parental report. Here data exist in sufficient quantity for valid analysis for SP's (N=19) and CON's (N=25).

Table (60) Parental report of childrens fears - GIRLS

FEAR	SP	CON
N=	19	25
Insects	6 (32%)	5 (20%)
χ^2	.277	
df	1	
p	.598	
Darkness	11 (58%)	2 (8%)
χ^2	10.62	
df	1	
p	.0011*	
Animals	3 (16%)	0 (0%)
χ^2	2.11	
df	1	
p	.146	
Going Out	4 (21%)	0(0%)
χ^2	3.52	
df	1	
p	.06	
Water	1 (5%)	0 (0%)
χ^2	.019	
df	1	
p	.889	
Heights	2 (11%)	0 (0%)
χ^2	.36	
df	1	
p	.352	
Other fears	3 (16%)	2 (8%)
χ^2	.106	
df	1	
p	.743	

*significant at or beyond .05 level

NB OPEN SPACES and ENCLOSED SPACES omitted here as no parent in either group reported that their child has a fear in this area. It is interesting to note that, as was the case with boys, only fear of DARKNESS proves to be statistically significant. There was also a trend in the case of fear of GOING OUT.

The question of the importance of such fears in determining group membership was investigated as part of a wider Discriminant Function Analysis. The presence or absence of each fear was entered (along with other pupil questionnaire variables) as independent variables in a Discriminant Function Analysis. Appendix (8) lists these variables and reports the Standardized Discriminant Function coefficients.

Fear of Insects, fear of the dark, fear of going out, and fear of heights all contribute. They do not however all contribute to the same functions. Fear of insects contributes to function 2, fear of darkness and of heights to function 3 and fear of going out to Function 1. Thus particular fears assume a different relevance when taken in weighted combination with other variables.

Finally the issue of whether the fears nominated by the pupils in the different groups are regarded by them as serious should be explored. It is plausible to conjecture that pupils more anxious about attending school would be more likely to regard any other fears as serious.

V67 (pupil questionnaire item 38) asks how serious the problem is in the individual's own perception of events. This seems the only valid means of judging the seriousness of fears in the absence to any more objective behavioural data.

Table (61) Seriousness of fears - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	14	16	14	43	14	81	16	81	16	43	43	81
Serious	6	3	6	5	6	5	3	5	3	5	5	5
	43%	19%	43%	12%	43%	6%	19%	6%	19%	12%	12%	6%
Not sure	3	6	3	11	3	18	6	18	6	11	11	18
	21%	38%	21%	26%	21%	22%	38%	22%	38%	26%	26%	22%
Not	5	7	5	27	5	58	7	58	7	27	27	58
serious	36%	44%	36%	63%	36%	72%	44%	72%	44%	63%	63%	72%
χ^2	2.2		6.7		16.1		5.37		1.7		1.4	
df	2		2		2		2		2		2	
p	.331		.033*		.0003*		.063		.417		.474	

*significant at or beyond the .05 level

Note N is smaller than usual in each group as only pupils reporting fears are included.

Unlike the situation with boys significant differences in self perceived seriousness of fears occurs between SP's and DA's and between SP's and CON's, with a trend toward significance between AA's and CON's. This is in the predicted direction with SP's more often regarding their fears as serious, AA's next, DA's next and CON's least.

SUMMARY - GIRLS

The hypothesis that the four groups under investigation would differ in terms of the co-occurrence of other fears with the most anxious groups being more prone to such other fears is not confirmed. No differences were found in the proportions of SP's, AA's, DA's or CON's who report other fears. Nor were there any differences in the mean number of fears reported.

The question of whether particular fears are over represented within the various groups generated a small number of significant findings. SP's were overrepresented only in the case of the fear of Going Out where they differed significantly from both DA's and CON's but not AA's. AA's differed from DA's on fear of Darkness and from CON's on fear of Water. DA's differ significantly from SP's, CON's and AA's only on fear of Insects. In line with prediction CON's are not significantly overrepresented in any of the fears.

Parent data on pupils fears are available only for SP's and CON's. Only fear of Darkness proved significant with a trend for Going out.

One must note however that for girls the presence of fear of Insects, Darkness, Going Out and Heights in weighted combination with other variables contribute to the outcome of a Discriminant Function Analysis.

DISCUSSION BOYS AND GIRLS

Miller et al (1974) point out that papers on school phobia in relation to other phobias of childhood appear in a ratio of 25:1. A number of writers have suggested a connection between school phobia and other fears. Eisenberg (1958a) asserts of the school phobic child 'Typically he has other fears which restrict his mobility', and Baldwin (1965) states that 'Other fears frequently accompany school phobia'. Van Houten (1943) makes the assumption that school phobics will have 'many' other fears while Frick (1964) talks of a 'wide range' of other fears.

Some workers are rather more specific. Bowlby (1973) talks of fear of animals, of the dark, of being bullied etc. Gittelman-Klein and Klein (1980) comment upon fear of the dark being 'prominent' with school phobic pupils. It is interesting that, despite an extensive search, no paper has come to light which specifically elicits information in regard to other fears from a school phobic sample.

The present study undertook to build in an investigation of other fears. It was felt that there would be likely to be a higher incidence of fears among those pupils who are most anxious about school and that a larger absolute number of fears would be reported by this group. These hypotheses were not confirmed though in a Discriminant Function Analysis certain fears in weighted combination with other variables make a significant contribution.

For boys the fears involved here are fear of Insects, fear of the Dark, fear of Going Out and 'Other Fears'. For girls the relevant fears also include fear of Insects, Darkness, and Going Out. Heights are added in the case of girls but 'Other Fears' omitted.

It would be wrong to assume from the above that the fears in common to both boys and girls are somehow more important. Examination of appendices (7) and (8) which list the variables entered in the analysis and their standardized Discriminant Function coefficients, reveals that these fears contribute differing amounts and to quite different functions. It is likely that these fears have different psychological meanings for boys and girls.

The present study reveals that girls report more fears than boys. Some 79% of girls report one or more fears compared with 60% boys (Chi Square 17.27, df=1, p=.0000). This is in line with the general findings on childrens fears (Jersild et al 1933, Crooke and Knox 1971). These writers report not only differences in incidence of fears but in content of fears.

It is interesting to note however that in the present sample there is no sex difference in the overall proportions of boys and girls reporting their fears as serious. The feeling that the fears are serious is reported for 19% of boys and 12% of girls (Chi Square 3.43 df=2, p=.1795). Within the girls groups however self perceived seriousness of fears proves significant.

The issue of content or focus of fear is of some theoretical significance. Freud, who called phobias the 'normal neurosis of childhood', argued that in the animal phobia the phobic object is a substitute for the father - a substitute on which the fear of the father derived from the oedipal complex has been displaced. This would suggest that fear of animals would be very common indeed. Yet the evidence from the present findings is very much against this accounting for only 2% of fears in boys and 4.5% in girls and with no special association with anxiety about school.

How can one begin to account for the lack of a strong association between anxieties about school and other fears of childhood? Might it be that fears are not the simple, unitary notion they at first appear? Miller et al (1972) looked at the factor structure of the fears of children aged from 6 to 16 years. They identified three factors. Factor 1 involved fear of physical injury, being kidnapped etc. Factor 2 included fear of the dark with natural disasters/events. Factor 3 (named psychic stress in the Miller et al study) included fear of failure. Marks (1969) lists specific animal and insect phobias as a separate category.

If various clusters of fears are factorially distinct then it is not so surprising that a general list of fears does not have a neat association with school phobia.

Bowlby (1973) comments on a distinction between a 'phobia' and a 'pseudophobia'. In the former what is feared is the presence of some object or situation whereas in the latter what is feared is the absence of an attachment figure or secure base. He classifies school phobia with agoraphobia as pseudophobias. Though at first contact this distinction has appeal it is in reality problematical to operationalize and it is not too difficult to envisage situations in which fearing the presence of some object situation or event generates some degree of dependency.

Within this framework fear of the Dark and of Going Out are less specific than the other listed fears and thus would seem to have more in common with Bowlby's pseudophobias. Among SP boys however only 13% fear the dark and this does not differ at a statistically significant level from the 6% of CON's who report this fear. A much higher 47% of Girl SP's report fear of the dark though this is not significantly greater than the 33% of CON girls who report this.

The situation with fear of Going Out is somewhat different. Some 17% of SP boys report this compared with none of the CON group - a highly significant difference ($p=.0007$). With girl SP's 26% report fear of going out whereas only 2% of CON's have this fear - again a highly significant difference ($p=.000$). Note however that this fear is reported only by a minority of SP's. It is not clear at this stage whether the school phobia in these cases is due to the fear of going out or vice versa.

Since the investigation of Hypothesis 1 has strongly suggested age differences among the groups one should bear in mind Bauer's assertion that fears should be considered as products of conceptions of reality created by children from perceptual and mental processes typical of their developmental level and age (Bauer 1980). Given the preponderance of school phobic style anxiety in the first three years of secondary schooling it may be that the greater cognitive flexibility of the stage of formal operations enhances a sense of risk or general vulnerability for some pupils.

In one of very few studies to compare fears by mental as well as chronological age Maurer (1965) demonstrated that there is a dramatic dropping away of these fears when mental age is taken into account. Maurer was however working with much younger children. Furthermore, though the evidence of the present study suggests that more anxious pupils have somewhat lower non-verbal ability scores, the differences are not so great as to account for the differences in anxiety. It may be more helpful to think in term of emotional and social maturity than of mental maturity.

One must also think in terms of instrument specific effects. The wording of the questionnaire item upon which the analysis in the present study is based asks the pupils "Do you ever feel frightened about any of the following" and provides a list. It could be that the use of the word 'frightened' encourages the pupil to focus on more autonomic bodily reactions. Liebert and Morris (1967) distinguish between 'worry' and 'emotionality' as components of anxiety. Worry emerges from their work as a cognitive dimension and emotionality as something akin to autonomic arousal. Thus worry is a more general concern while emotionality includes all the visceral flavour of anxiety.

Morris et al (1976) report decrements with age in the amount of worry experienced by children but not for emotionality. They also suggest sex differences for emotionality with girls being more prone to this reaction.

It appears that worry as a measurable variable is consistently more related to academic work and ability in a negative direction than is emotionality. It seems that worry varies as an inverse function of expected performance and as a function of failure threat or negative feedback. Emotionality on the other hand seems unrelated to these conditions and is aroused largely by specific situational cues. It is possible that the AA/DA groups in the present study represent aspects of the worry/emotionality distinction.

The defining characteristics of the SP and AA groups seem to call for the joint occurrence of emotionality and worry whereas the DA group requires only the presence of anxiety about school without associated visceral symptoms.

Present data do not permit a resolution to these issues. What can be said however is that the simple assumption that school phobic children are routinely prone to associated other fears is on present evidence without foundation.

HYPOTHESIS 3 - The Interpersonal Domain

In the previous sections we began by looking at the validity of the proposed typology of school attendance anxieties which was then examined against the wider background of the major demographic factors of age, ability, sex and social class. It was then assertained that the identified school anxieties are not merely a dimension of a wider network of other fears and phobias. Against this perspective we now turn to an investigation of the interpersonal domain. This is explored via the 7 sub-hypotheses listed below.

Hypothesis 3a.

The 4 groups will differ on a specially created 'Difficulty with Friendship' variable. It is predicted that SP's will report most difficulty, AA's next, DA's next and CON's least difficulty. It is also predicted that data from the parental questionnaire will be in accord with this. Additionally it was predicted that between group differences will be reflected in teacher perceptions as indexed by the Rutter Child Behaviour Scale items. In particular it is felt that the differences will be reflected in item 5 (V79), 'Frequently fights with other children', item 6 (V80), 'Not much liked by other children' and item 8 (V82), 'Tends to be on his own - rather solitary'.

Hypothesis 3b.

The four groups will differ in the proportion of their friends who come from their school and the age and sex of their friends. It is predicted that the more anxious the pupil about school the more likely it is that he or she will regard his or her friends as coming from other schools.

It is also predicted that more anxious pupils will have a higher proportion of younger friends and that their friends will more often be of the same sex as themselves. This will reflect in parental as well as direct pupil data.

Hypothesis 3c.

The four groups will differ in terms of a specially created 'Vulnerability in School' variable. The predicted direction is that the more anxious pupils in regard to school will have a greater sense of vulnerability in school.

Hypothesis 3d.

The four groups will differ in terms of a specially created 'General Satisfaction With School' variable. The predicted direction being that the more anxious pupils will report less satisfaction with school.

Hypothesis 3e.

The groups will differ in terms of their sociometrically defined status with their peers. It is predicted that the more anxious pupils will be overall less popular and more prone to rejection.

Hypothesis 3f.

The groups will differ in terms of their preferred spare time activity. This will be in the direction of the more anxious groups having more potentially socially isolated preferences eg listening to records and fewer outward acting preferences eg attending clubs.

It is also predicted that this pattern will be reflected in terms of parental view of childs spare time activity and additionally it will reflect in where the child is when not in school in terms of distance from the home with the more axious groups tending to be closer.

Hypothesis 3g.

The groups will differ in the proportion staying off school by pretending to be sick in the direction of a higher proportion of more anxious pupils reporting this. It is further hypothesized that a smaller proportion of the anxious groups will report truancy.

Hypothesis 3a - Boys

Hypothesis 3a states:

"The four groups will differ on a specially created 'Difficulty with Friendship' variable. It is predicted that SP's will report most difficulty, AA's next, DA's next and CON's least difficulty. It is also predicted that data from parental questionnaires will be in accord with this."

The variable Difficulty with Friendship was constructed from pupil responses to Pupil Questionnaire item 27 (V40) which asks: 'Do you feel that you make friends: very easily, fairly easily, find it difficult, never seem to bother, want to make friends but somehow cannot.' Any child responding with 'find it difficult', 'never seem to bother' or 'want to make friends but somehow cannot' was included in the Difficulty with Friendship category. Numbers in each group - especially the more anxious groups did not permit separate analyisis by these individual responses. This process might seem uncontentious with the exception of 'never seem to bother'. Here the numbers were small involving a total of only 5 pupils across all 4 groups. Clinical experience suggests that this category is more likely to include pupils with at least a degree of difficulty in making friends.

Table (62) presents the results of a Chi Square Analyis for the four groups in terms of this variable.

Table (62) Chi Square analysis of 'Difficulty with Friendship' variable by group membership.

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
YES	12	6	12	6	12	8	6	8	6	6	6	8
	40%	29%	40%	13%	40%	9%	29%	9%	29%	13%	13%	9%
NO	18	15	18	38	18	80	15	80	15	38	38	80
	60%	71%	60%	87%	60%	91%	71%	91%	71%	87%	87%	91%
χ^2	.706		.673		15.18		5.74		2.1		.639	
df	1		1		1		1		1		1	
p	.4006		.009*		.0000*		.016*		.146		.423	

*significant at or beyond .05 level

It is clear from table (62) above that SP's are very significantly more likely than CON's to perceive themselves as having difficulties with friendships - 40% of SP's reporting this compared with only 9% of CON's. SP's do not difer significantly from AA's though the direction is as predicted with a higher proportion of SP's having difficulties. SP's and DA's also differ at a highly significant level with only 13% DA's having such difficulties.

There appears to be a straightforward linear trend in the direction of the hypothetical prediction downwards from 40% SP's - 29% AA's - 13% DA's - 9% CON's.

Data are available in sufficient quantity to permit statistical analysis from the parents of N=30 SP's, N=18 DA's and N=30 CON Boys. There is insufficient data on AA's. The parents of 40% of school phobics report their children as having difficulty in making friends compared with only 17% CON's (Chi Sq 4.02, df 1, p .044). The differences between the parents of SP's and DA's are even more marked with only 13% of the DA's being reported as having friendship difficulties (Chi Sq 4.54 df 1 p .033) while the differences between the DA's and CON'S do not reach significance (Chi Square .278, df 1, p .597).

Here it is clear that, though statistically significant differences are found, the direction is not strictly in accord with prediction. This hypothesis predicted that the most significant differences would occur between SP's and CON's while the obtained figures indicate the greatest significance occurs between the SP and DA groups.

It is of interest to note how close are the proportions in terms of child self-perception and parental perceptions of difficulty in making friends. Parental support for pupil data is helpful in validating that a substantial proportion of SP's have difficulties in friendship formation.

What is the situation in regard to teacher perceptions? Unfortunately here again the data are incomplete in that no Rutter Scale data are available for the SP group. However such data are available for N=16 AA's, N=44 DA's and N=84 CON boys. Appendix (9) reports the results of a Chi Square Analyis of Rutter item 5 (V79) 'Frequently fights with other children', Rutter item 6 (V80) 'Not much liked by other children' and Rutter item 8 (V82) 'Tends to do things on his own - rather solitary'.

No significant diferences are found among these three groups on any of the items. It is clear therefore that teacher perceptions as tapped by the Rutter Scale do not reflect differences among the three groups on whom data are available. This could be due either to instrument failure or to the absence of behavioural differences at classroom level.

Since good reliability and validity figures are usually found for the Rutter Scales attention is concentrated on the latter possibility. One should note that the items sampled here would be reasonably clear cut especially in relation to 'frequent fights' and 'tends to be solitary'. 'Not much liked' would be harder to operationalize at the level of observation.

One final means of evaluating the importance of the friendship difficulty variable for the various groups is to look at the patterns of correlation found between this variable and other pupil questionnaire data. It must be acknowledged that such an approach has to be used with considerable caution as correlation is not the same thing as cause. Furthermore even if a causal link could be attributed on the basis of other data problems exist in determing the direction of effect.

None the less there is a sense in which those variables which correlate in different patterns for different groups may reflect aspects of differing underlying psychological meaning which may be of considerable interest and importance.

Table (63) indicates the number of correlations significant at or above the .05 level between the difficulty making friends variable and other pupil questionnaire variables.

Table (63) Number of significant correlations between difficulty making friends and other pupil data.

	Number of significant correlations
SP	16 (+2 Trends)
AA	4 (+5 Trends)
DA	8 (+4 Trends)
CON	4 (no Trends)

Appendix (10) provides the full matrix of significant correlations (and trends toward significance) for each of the groups.

The following 'correlational portrait' of each group emerges on the basis of their respective patterns of significant correlations.

For SP boys difficulty in making friends is significantly associated with dissatisfaction with their own behaviour in school (r=.576, p=.000), and their own work (r=.644, p=.000), which they find difficult (r=.622, n=.000), feeling their teachers dissatisfied with their school work (r=.429, p=.009), and their behaviour (r=.387,n=.017), which may all contribute to their dislike of school (r=.408, p=.013), and desire to go to another school (r=.524, p=.001) with a simultaneous (though possibly related) feeling that they are unhappy at home (r=.467, p=.005).

Difficulty in making friends is also associated with anxiety regarding school (r=.465, p=.005), frequency of psychosomatic symptoms (r=.337, p=.034) and self perceived seriousness of fears (r=.467, p=.005), being worried without any special reason (r=.433, p=.008), the feeling that there is no one they can really talk to (r=.599, p=.001), dislike of changing for games or having showers (r=.539, p=.001), feeling bullied (r=.292, p=.058) problems getting off to sleep (r=.344, p=.032) and night time waking (r=.271, p=.077).

For AA boys difficulty in making friends is significantly associated with ability (r=.564, p=.004), dissatisfaction with their own school work (r=.369, p=.05), but, unlike SP's, tending to feel that their parents are satisfied with their work (r=.306, p=.089) and more vigorously that they are afraid of their teachers (r=.673, p=.000), and that their class is too badly behaved to get proper work done (r=.371, p=.048). Like SP's the tend to feel that they have no one they can really talk to (r=.299, p=.094). They also tend to worry regarding their mother or father while they're at school (r=.316, p=.081), to have more frequent psychosomatic symptoms (r=.323, p=.077) and to have bad dreams (r=.316, p=.081). There is a specially strong association between difficulty in making friends and the total number of negative choices made on the sociometric data (r=.807, p=.000). (Sociometric data are not available for the SP group).

With DA boys difficulty in making friends is significantly correlated with anxiety regarding school (r=.368, p=.007), a tendency to dislike school (r=.213, p=.082) and to be dissatisfied with their own behaviour in school (r=.22, p=.074) and a feeling that their teachers are dissatisfied with their behaviour in school (.238, p=.059). The association with wishing to change school is stronger (r=.542, p=.000), feeling teased (r=.359, p=.008), being bullied (r=.382, p=.005) and something of a trend towards feeling that the class is too badly behaved for proper work (r=.197, p=.099). There is also a strong association with feeling that their parents are dissatisfied with their behaviour at home (r=.439, p=.001), and having no one to talk to (r=.379, p=.006) and that any fears expressed are serious (r=.292, p=.027).

For CON boys difficulty in making friends is significantly associated with age (r=.178, p=.049), desire to change school (r=.184, p=.045), feeling afraid of their teachers (r=.196, p=.034) and having no one to talk to (r=.23, p=.016).

It is interesting to note from the above that only 1 variable achieved or approached significant correlation for all 4 groups namely V21 'Sometimes I feel I have no one I can really talk to'-(SP r=.599, p=.000, AA r=.299, p=.094, DA r=.379, p=.006, and CON r=.23, p=.016).

SUMMARY - BOYS

The obtained results from the pupil questionnaire data lead to an acceptance of hypothesis 3a. 40% SP's, 29% AA's, 13% DA's and 9% CON's admit to difficulty in making friends.

Available parent data produced an identical proportion of SP's regarded as having difficulty making friends though parent data departed from the predicted direction in finding somewhat more CON's had difficulty making friends than DA's. However this difference did not reach statistical significance.

Hypothesis 3a was not confirmed in terms of teacher data. The three Rutter Scale items (Frequent fights with other children, Not much liked by other children and Tends to be on his own - rather solitary') failed to discriminate among the groups.

Examination of the pattern of significant correlations between the difficulty making friends variable and other pupil data demonstrated very considerably more significant correlations for the SP group.

GIRLS

The Difficulty with Friendship variable was defined in the same way as with Boys. Once again the first task is to gain an overview of this data in terms of group membership. Table (64) presents these figures.

Table (64) Difficulty with Friendship by group membership - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
YES	10	8	10	9	10	13	8	13	8	9	9	13
	53%	47%	53%	18%	53%	12%	47%	53%	47%	18%	18%	12%
NO	9	9	9	40	9	95	9	95	9	9	9	95
	47%	53%	47%	82%	47%	88%	53%	88%	53%	47%	47%	88%
χ^2	.111		7.98		17.95		12.88		5.4		1.12	
df	1		1		1		1		1		1	
p	.738		.004*		.0000*		.0003*		.019*		.289	

* significant at or beyond .05 level

As is the case with the boys data, the present results for girls very strongly confirm the Hypothesis that pupils more anxious in regard to school attendance are very significantly more likely to perceive themselves as having difficulties in friendship formation. Once again there appears to be a straightforward linear trend in the predicted direction with 53% SP girls reporting this: 47% AA's, 18% DA's and 12% CON's.

Data are available in sufficient quantity to permit valid analysis from the parental view of N= 19 SP girls and N=25 CON's. The parents of only 13 (68%) of SP girls report that these pupils have difficulty in making friends compared with the parents of only 4 (16%) of the parents of the CON group (Chi Sq 12.51, df 1, p .0004).

These results clearly confirm that, even from the parental viewpoint, a higher proportion of SP than CON girls have difficulty with friendship making. As with the boys data there is a close similarity between the proportions of pupils reporting friendship difficulties and the proportions of parents reporting this in regard of their children.

It is also of interest to examine the data in regard to teacher perceptions as indexed by the Rutter Scales. Here data are available for the AA, DA and CON groups. No Rutter Scale Data are available for the SP group. Appendix (11) reports the results of this analysis. The situation here is similiar to that which obtained with boys. However in the case of the girls the teachers of 29% of the AA's and only 9% of CON's reported them as 'not much liked' (Chi Sq 6.05, df 1, p .013).

Patterns of correlations between the 'Difficulty Making Friends' variable and other pupil questionnaire data were also explored with the girls sample. Table (65) indicates the number of significant correlations. Appendix (12) provides the full matrix of significant correlations.

Table (65) Number of significant correlations between difficulty in making friends' and other pupil data - GIRLS

	Number of significant correlations
SP	5 (+2 trends)
AA	8 (+2 trends)
DA	3 (+2 trends)
CON	2 (+3 trends)

Correlational portraits were also produced for the girls data for each group.

For SP girls difficulty in making friends is associated with becoming worried without any special reason (V18- r=.485, p=.018), feeling anxious regarding school (V9- r=.322, p=.089), a higher frequency of psychosomatic symptoms regarding school (V53- r= .48, p=.019), and the feeling that these symptoms are serious (V54- r=.515, p=.012), feeling teased in school (V14- r=.311, p=.097), a feeling they have no one they can really talk to (V21- r=.459, p=.024), and of being unable to work because their class if too badly behaved (V19- r=.427, p=.034).

Among AA girls such self perceived difficulty with friendship is associated with somewhat higher ability (V6- r=.542, p=.028), with feeling anxious regarding school but not knowing why (V9- r=.425, p=.044), frequency of psychosomatic symptoms (V53- r=.528, p=.015), worrying for no special reason (V18- r=.471, p=.028), feeling teased (V14- r=.527, p=.015), and bullied (V25- r=.605, p=.005), feeling they have no one they can really talk to (V21- r=.574, p=.008), judging their other fears to be serious (V67- r=.421, p=.046), problems sleeping (V30- r=.358, p=.079), and with night time waking (V31- r=.34, p=.088).

With DA girls the significant associations with self perceived difficulty in making friends are age (V5- r=.204, p=.079), feeling parents are dissatisfied with behaviour at home (V10- r=.192, p=.093), and with the standard of their school work (V15- r=.247, p=.043), and that teachers are dissatisfied with their school work (V17- r=.228, p=.05), and with the seriousness of other fears reported (V67- r=.244, p=.045).

With the CON girls self perceived friendship difficulties are associated with IQ (V6- r=.149, p=.089), feeling teachers are dissatisfied with their school work (V17- r=.186, p=.028), problems sleeping (V30- r=.158, p=.05), bad dreams (V32- r=.138, p=.07), seriousness of fears (V67- r=.138, p=.07).

SUMMARY - GIRLS

The obtained results for girls confirm Hypothesis 3a in regard to pupil self perceived difficulty in making friends. Such difficulties are admitted by 53% SP's, 47% AA's, 18% DA's and 12% CON's.

Parental data are available on SP and CON groups. The parents of 68% SP girls report that their children have difficulty making friends compared with the parents of only 16% or CON's.

Teacher completed Rutter Scales did not produce any significant differences among the AA, DA and CON groups upon whom these data are available in terms of 'Frequent Fights', or being 'Rather Solitary'. On the 'Not Much Liked by other Children' category there was a significant tendency for more AA's than CON's to be so regarded, with more AA's being felt to be in this category.

Examination of the pattern of significant correlations between the difficulty with making friends variable and other pupil variables produced a less clear picture in the case of girls than of boys. Girl SP's do not have significantly more correlations with other variables -nor do those they have form such a clear picture.

DISCUSSION BOYS AND GIRLS

The strong clinical impression of peer related problems among school phobics as a component of their difficulties is in part validated by the published literature on the importance of peer relationships for good adjustment in general (MacMillan et al 1978, Vernon 1969, Bonney 1943, Izard 1959, Bauer 1971).

More directly in terms of the school phobia literature as early as 1939 Partridge listed the ability to make friends as one of his 6 criteria for successful adjustment to school (he separately lists the ability to keep friends) while Klein (1945) included 'fear of other pupils' as a component of his three part classification of childrens anxieties in relation to attending school.

Other more recent writers have also enlisted this dimension in an explanatory way (Van Houton 1948, Hitchcock 1956, Davidson 1960, Weiss and Cain 1964, Cooper 1966, Marklund 1973, Torma and Halsti 1975, Mattejat 1981, Comiti 1976, Hersov 1977, Ojanen 1980, Heath 1983).

The primary focus of hypothesis 3a relates to pupil self perception in this area though an attempt to broaden this by considering parental report and teacher impressions is also made. The results very significantly confirm the hypothesis for both girls and boys.

Among the SP group 53% of girls and 40% of boys acknowledge this as a problem area for them. Very much in line with prediction smaller proportions (though not significantly smaller) of AA's report this - 47% AA girls and 29% AA boys. Among DA's 18% of girls and 13% boys report this compared with only 12% of CON girls and 9% of CON boys.

Though the overall numbers of boys and girls reporting friendship difficulties does not differ (Chi Square .636, df=1, p=.424) it remains unwise on present evidence to consider the similarities of proportions as indicating that the same thing is being talked about with both boys and girls.

In this regard the correlational portrait approach is helpful in highlighting the differences. What is specially striking here is the very considerably greater number of significant correlations for boy SP's than for girls. If one accepts that the number of significant correlations may reflect the 'tightness' or 'looseness' of construing of the subjects in the various groups then friendship difficulties could be seen as more loosely construed among SP boys. For this group the significant association with so many variables may mean that the typical school day and organization is a minefield of potentially painful encounters or at least of anxious regard for such possibilities.

Button (1983) argues that there is growing evidence that constructs are relatively highly correlated in people with emotional or neurotic problems. He argues that the origin of psychological disorder lies in the difficulty in 'person construing' with particular reference to self - construing.

The ability to maintain a relatively stable yet flexible form of self construction may be of crucial importance. Social relationships, although potentially validating also carry the risk of invalidating our self construction. One should remember here that in some cases this may be of profound importance. Bannister (1963) in relation to schizophrenics argues that 'loose construing' may be the end product of what he called 'serial invalidation' ie being repeatedly provided with negative feedback regarding self.

It may be that at least some school phobics experience school not simply as a socially harsh or emotionally cold and alienating place but that it actually comes to represent a more fundamental challenge to their sense of self. Such a conceptualization would certainly help explain the otherwise confusing and apparently disproportionate intensity of reaction when many school phobics are faced with the prospect of going to school.

Tempting, even powerful, though these ideas may be one must be very cautious here for two reasons (a) the present study is dealing with questionnaire item responses not elicited constructs in the sense worked with by Bannister and Button and (b) about half of SP's fail to report any friendship difficulties.

Examining the evidence, where it is available, from the parental point of view acts as a form of outside validation of the friendship issue. The parents of 68% of girl SP's and 40% boy SP's report that these pupils have difficulties with friendships whereas the parents of only 16% CON girls and 17% CON boys so report.

The situation with data drawn from teachers is different. Unfortunately such data are not available for SP boys or girls. Of the three relevant variables from the Rutter Scale it is only on the 'Rather Solitary' item for girls that a significant difference emerges. Two explanations come to mind. Firstly, it may be specially difficult for teachers in the secondary school setting to have a full knowledge of this area and secondly evidence needs to be adduced in regard to the reality base of pupils perceptions about their friendships. This is explored more fully in the investigation of hypothesis 3e relating to sociometric measures of popularity and rejection.

Before that however more needs to be known in regard to friendships among these groups. To this end Hypothesis 3b examines the issues of age and sex of friends.

HYPOTHESIS 3b

This hypothesis states that the four groups will differ in the age and sex of their friends. Here it is predicted that more anxious pupils will have a higher proportion of younger friends and that their friends will more often be of the same sex as themselves.

It is also argued that the groups will differ in the proportion of friends who come from the school which they themselves attend. The prediction here is that the more anxious the pupil is about school the more likely it is that he or she will regard his or her friends as coming from other schools.

The data in the analysis of Age of Friends comes from V42 (pupil questionnaire item 27) which asks "Are your friends usually, - about the same age as you - younger - older- or -a wide mix of ages-". V192 asks the same question from the parental point of view.

Sex of friends is again determined by pupil report. V43 (pupil questionnaire item 30) asks pupils to say if their friends are mostly 'Boys', 'Girls', or 'about equal numbers of each'.

Whether friends attend the same school as the child is sampled by V41 (pupil questionnaire item 28) which asks if 'most', 'one or two' or 'none' attend the same school.

Age of Friends - BOYS

Table (66) reports the results of an analysis of the data on the four groups from the pupil questionnaire. These data are available on all the children in each of the four groups.

Table (66) Age of friends by group membership

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
Same Age	13 43%	7 33%	13 43%	15 35%	13 43%	31 35%	7 33%	31 35%	7 33%	15 35%	15% 35%	31 35%
Younger	0 0%	0 0%	0 0%	3 7%	0 0%	1 1%	0 0%	1 1%	0 0%	3 7%	3 7%	1 1%
Older	2 7%	2 10%	2 7%	2 5%	2 7%	11 13%	2 10%	11 13%	2 10%	2 5%	2 5%	11 13%
Wide Mix	15 50%	12 57%	15 50%	22 50%	15 50%	45 51%	12 57%	45 51%	12 57%	22 50%	22 50%	45 51%
χ^2	.562		2.53		1.43		.499		2.08		5.04	
df	2		3		3		3		3		3	
p	.755		.468		.698		.919		.555		.168	

It is clear from this table that there are no significant differences in respect to age of friends as reported by the pupils themselves. The hypothesis that more anxious pupils will have younger friends is not borne out. We cannot say from this data however if there is a differential distribution within the 'wide mix' category.

Data on parental views of age of friends is available for SP's, DA's and CON's. Unfortunately it does not exist in sufficient quantity to permit analysis with the AA group. Appendix (13) reports the results of an analysis of parent data on this variable.

Here only the comparison of SP's with CON's reaches statistical significance (Chi Sq 10.63, df 3, p .014). The direction of effect with more parents of SP's reporting younger friends for their children is in the predicted direction.

Sex of friends BOYS

It is hypothesized here that those pupils with anxieties about going to school will tend more often to have same sex friends. The data upon which this hypothesis is tested are provided by the pupil questionnaire responses to the questionnaire item 'Most of my friends are - boys - girls- about equal numbers of each-.

Table (67) presents the results of a Chi Square analysis of this data. It can be seen that the analysis fails to confirm the hypothesis in terms of statistical significance. The proportion of SP boys who report same sex friendships is in the predicted direction but does not reach significance. It is interesting to note how similar the school attending groups are in terms of same sex friendships with between 45% and 50% so responding.

Table (67) Sex of Friends by group membership -BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
Boys	21 70%	10 48%	21 70%	20 45%	21 70%	45 51%	10 48%	45 51%	10 48%	20 45%	20 45%	45 51%
Girls	0 0%	0 0%	0 0%	1 2%	0 0%	5 6%	0 0%	5 6%	0 0%	1 2%	1 2%	5 6%
Equal	9 30%	11 52%	9 30%	23 52%	9 30%	38 43%	11 52%	38 43%	11 52%	23 52%	23 52%	38 43%
χ^2	2.59		4.66		4.10		1.55		.492		1.46	
df	1		2		2		2		2		2	
p	.107		.096		.128		.459		.782		.480	

Friends from School - BOYS

Though pupils in the various groups have not been found to differ in the self reported age or sex of their friends it may still be that those more anxious about school regard their friends as coming from schools other than the one they attend. V41 (pupil questionnaire item 28) asks 'Do your friends come from your school? 'most of them', 'one or two of them', 'none of them'.

In the analysis which follows the categories 'one or two' and 'none' have been combined and appear on the table as 'Few' while 'most of them' appears as 'most'.

Table (68) Friends from school by group membership

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
	21	9	21	19	21	64	9	64	9	19	19	64
Most	70%	43%	70%	43%	70%	73%	43%	73%	43%	43%	43%	73%
	9	12	9	25	9	24	12	24	12	25	25	24
Few	30%	57%	30%	57%	30%	27%	57%	27%	57%	57%	57%	27%
χ^2	3.75		5.16		.082		6.8		.000		10.9	
df	1		1		1		1		1		1	
p	.052*		.023*		.773		.008*		.980		.000*	

*significant at or beyond .05 level

It is clear from Table (68) that there are some very significant differences among the four groups in terms of the degree to which they see their friends as coming from schools other than the one which they attend. However it must be noted that these data only partly confirm the hypothesis. What has to be noted here is that the figures confirm the hypothesis only in regard to the school attending groups. Only 43% of both the AA and DA groups report that most of their friends come from their school compared with 73% of the CON group. Within this context it is surprising that 70% of SP's report that their friends come from their schools.

Examined from the point of view of parent data a rather different picture emerges. Appendix (14) reports the results of this analysis. This indicates that there are no statistically significant differences from parental viewpoint.

There are clearly fairly marked contrasts between the parental and subject self views. The parents of 13 (43%) of SP's feel that their childrens friends come mainly from their school whereas this is the view of 70% of the pupils themselves (Chi Sq 4.34, df=1, p=.034).

This is not simply an artefact of the relationships which exist with the families of SP's. Indeed the obtained significance is even greater in the case of the CON group. Here the parents of 10 (33%) of pupils felt that their friends come mainly from their own school whereas the CON'S themselves felt this to be true in 64 cases (73%). (Chi Square 14.84, df=1, p=.0001).

That this is not part of a systematic parental misjudgement among the parents of secondary age pupils can be seen in the non significant findings in regard to the DA group. Here the parents of 11 (61%) of pupils felt that their childrens friends came from their school while among the DA's themselves 19 (43%) reported this (Chi square 1.6, df=1, p=.199).

SUMMARY OF RESULTS - BOYS

The hypothesis that there will be differences among the groups in terms of age of friends is not confirmed by child self-report data. Parental report indicates significant differences for SP's when compared with CON's in the predicted direction of more CON's having same age friends. Parents of SP's also report a significantly higher proportion to have younger friends.

No differences in sex of friends was obtained from the child self-report data though there was a trend for SP's to report more same sex friendships.

Significant differences were found among the groups in terms of the proportions feeling that their friends come from their own school. Surprisingly 70% of the SP group report this whereas only 43% of AA's and DA's did so. With the CON's 73% also report that most of their friends come from their school.

No significant differences were found in terms of parental data though there was a trend towards significance with 61% of the parents of DA's feeling that most of the friends are from the child's own school compared with only 33% of CON's.

Important levels of disagreement between parental and pupil self-report views were noted.

Age of friends - GIRLS

This area was sampled for girls in the same manner as the boys.

Table (69) Age of friends by group membership - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
Same age	10 53%	3 18%	10 53%	13 27%	10 53%	35 33%	3 18%	35 33%	3 18%	13 27%	13 27%	35 33%
Younger	3 16%	1 6%	3 16%	1 2%	3 16%	6 6%	1 6%	6 6%	1 6%	1 2%	1 2%	6 6%
Older	1 5%	6 35%	1 5%	10 20%	1 5%	9 9%	6 35%	9 9%	6 35%	10 20%	10 20%	9 9%
Wide mix	4 21%	7 41%	4 21%	25 51%	4 21%	55 52%	7 41%	55 52%	7 41%	25 51%	25 51%	55 52%
χ^2	9.13		12.2		7.67		10.0		2.43		5.29	
df	3		3		3		3		3		3	
p	.027*		.006*		.053		.018*		.487		.151	

*significant at or beyond the .05 level

Unlike the situation with boys there are many highly significant differences among the girls groups' here. A surprisingly large proportion of SP's report same age friendships and a particularly small proportion of AA's so report. Absolute numbers are too small to place much weight on the differences in reporting of younger friends.

It is interesting to note, however, the fact that AA and DA girls report relatively higher proportions of older friends. This finding is very much against the predicted direction of effect.

Data on parental views is available only from the parents of the SP's and of N=25 CON's. Here the parents of 84% of CON's compared with only 42% of SP's report same age friendships for their children. Some 37% of the parents of SP's report younger friends while none of the parents of CON's so report. Among the parents of SP's, 'older' and 'wide mix' are nominated by 11% compared with no parent of CON's reporting younger or older friendships and 16% reporting a wide mix (Chi Sq 17.09, df 3, p .0006).

As with the boys there is a statistically significant difference here. It is interesting to note how similar are the proportions of parents who report same age friendships for both boy and girl SP's and CON's.

Sex of Friends - GIRLS

Having noted that the age distribution of friends seems to differ in a significant way among the various girls' groups the question of sex of friends is now explored. The results of this analysis are reported in Table (70).

Table (70) Sex of Friends by group membership - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
	0	1	0	1	0	8	1	8	1	49	49	8
Boys	0%	6%	0%	2%	0%	7%	6%	7%	6%	2%	2%	7%
	15	10	15	13	15	53	10	53	10	13	13	53
Girls	79%	59%	79%	27%	79%	49%	59%	49%	59%	27%	27%	49%
	3	6	3	31	3	46	6	46	6	31	31	46
Equal	16%	35%	16%	71%	16%	43%	35%	43%	35%	71%	71%	43%
χ^2	2.97		15.4		7.3		.507		5.8		8.7	
df	2		2		2		2		2		2	
p	.226		.0004*		.025*		.775		.054*		.012*	

*significant at or beyond the .05 level

Once again the girls' data generates a very different picture from the boys. SP girls have very significantly more friends of the same sex as themselves. However it is only in this regard that these data confirm the hypothesis though the direction of effect holds good with AA's even if the difference does not reach statistical significance.

Friends from School - GIRLS

As with the boys' data the response 'one or two' and 'none' in response to the question 'Do your friends come from your School' have been combined in this analysis and appear on the table as 'few', while 'most of them' appears as 'most'.

Table (71) Friends from school by group membership -GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
	11	11	11	41	11	86	11	86	11	41	41	86
Most	56%	65%	56%	83%	56%	80%	65%	80%	65%	83%	83%	80%
	8	6	8	8	8	22	6	22	6	8	8	22
Few	44%	35%	44%	17%	44%	20%	35%	20%	35%	17%	17%	20%
χ^2	.175		5.05		4.23		1.88		2.71		.356	
df	1		1		1		1		1		1	
p	.675		.024*		.039*		.170		.099		.550	

*significant at or beyond the .05 level

It can be seen from this table that the hypothesis is partly borne out for girls. Among SP's 44% indicate that few of their friends come from their school, while the figure for AA's is close at 35%. However the DA and CON groups are rather more similar than the prediction with 17% of DA's and 20% of CON's reporting few friends from their own school.

Data are also available from the parents of N=19 SP's and N=25 CON's. The parents of 42% of SP's report that most of the childrens' friends come from their own school with a similar 48% of the parents of CON's so reporting (Chi Sq .151, df 1, p .697). Thus parental data fail to reveal any significant differences.

SUMMARY OF RESULTS - GIRLS

The hypothesis that there will be differences among the groups in terms of age of friends is partially borne out for girls though the direction is not always as predicted. Same age friends are reported by 53% of SP's, 18% of AA's, 27% of DA's and 33% of CON's. SP's differ significantly from AA's, DA's and CON's in the distribution of their friendship ages. Parental report is not is agreement with the self report evidence.

Sex of friends also proved to be significant with girls. Same sex friendships are reported by 79% of SP's, 59% of AA's, 27% of DA's but (against prediction) by 49% of CON's. SP's significantly differ from DA's and CON's but not from AA's.

In terms of the proportion of friends who do not come from their own school this is the case with 44% of SP's and 35% of AA's but only with 17% of DA's and 20% CON's. The SP's differ significantly in this respect from both DA'S and CON's. This did not hold with parental report.

DISCUSSION BOYS AND GIRLS

It had been hypothesized that pupils in the groups displaying anxiety regarding school attendance would be more likely to have younger friends. The situation proved to be more complex than this simple arrangement. With boys there was a considerable uniformity in the numbers reporting that most of their friends were the 'same age' and 'a wide mix'. No significant differences by group membership was found. The hypothesis was therefore not confirmed for boys.

However for girls 53% of SP's reported 'same age' friendships compared with only 18% of AA's, 27% of DA's and 33% of CON's. Only 21% of SP's report 'wide mix' but this is indicated by more than 40% of each of the other groups. More of the AA's claim that their friends are older. Data from parental report is non-significant for boys but highly significant for girls. Here 37% of parents of SP's report that their phobic children have younger friends whereas none of the parents of the CON's report this. It may be that pupils perceive an element of stigma in admitting younger friends - though why this should be more problematical to admit than the anxieties it is hard to say.

In dealing with hypothesis 3e the issue of sociometrically defined differences in the nature of friendships is explored in some detail. Important differences by sex of subject are highlighted.

The question of sex of friends may lead to difficulties about willingness to report. It also creates special interpretative complexity when dealing with young adolescents. In particular we must note that all of the pupils in the present mainstream school sample attended single sex schools.

It had been hypothetized that more anxious pupils would tend to have more same sex friends. In part this could reflect a carrying over of patterns from the primary age range. In part it might also be influenced by the single sex schooling issue though the question of whether friends came from the subjects own school was explored as a separate sub-hypothesis.

This hypothesis was not borne out for either the girls or boys in terms of the school attending groups. Among SP boys 70% indicate same sex friends whereas this is so with only 48% of AA's, 45% of DA's and 51% of CON's. With girls the 'same sex' category was nominated by 79% of SP's, 59% of AA's, 27% of DA's and 49% of CON's. The figures for SP boys and girls are very close. The figures for the school attending groups are also very similiar with the exception of fewer DA girls. There was a very strong tendency for the latter to nominate the category of 'wide mix' in a high proportion of cases (71% compared with 43% of CON's, 35% of AA's and only 16% of SP's).

It is feasible to argue that having opposite sex friends requires rather more self confidence than SP's can routinely muster. However there is a possibility that this may partly be explained in terms of opportunities. Given single sex schools only those with active out of home lives would have such opportunities. Also this is overall an age range in which having a friend of the opposite sex would attract a different level of reaction from other pupils which might well include some sexually loaded teasing. If one remembers that McFarlane et al (1954) reported that one third of normal boys and girls show reserve and put this in the context of SP's having more difficulties in making and maintaining friendships then the pattern is not so surprising.

Though the numbers are too small to allow for statistical analysis it is worth pointing out that no SP girl or boy and only one AA girl report that most of their friends are of the opposite sex whereas one DA girl and one boy and 5 CON boys and 8 CON girls so report.

The hypothesis that the more anxious pupils are about school the greater are the chances of regarding their friends as coming from other school was borne out only in relation to the school attending boys. Among these pupils the direction was as predicted with 57% AA's and DA's reporting that few or none of their friends came from their present school compared with only 27% of CON's so reporting.

With girls the proportions are rather smaller. Here 35% of AA's report few or none of their friends are from their school. Note however that only 17% of DA girls report this and 20% of CON's.

The results for the SP boys are counter intuitive. This group is remarkably similar to the CON boys from which maximum difference was predicted. The direction of effect with girls was more in line with prediction. How might these findings be explained?

Is it that being in school despite anxiety in regard to attendance is compensated for by AA and DA boys by seeking solace elsewhere? An alternative would be to argue that for boys at least that some of the anxiety in school is related to the lack of friends. The latter interpretation is somewhat more in line with other published data eg Measor and Woods (1984) found that having friends was seen as a defence against bullying. (The issue of bullying and associated dimensions of school life are dealt with more fully in the next section which lends some support to this argument).

It is interesting to note that significantly more SP boys than AA boys report that most of their friends come from their school. At first sight this is a surprising finding given the higher proportion of SP's who admit to experiencing difficulty in making friends.

An explanatation here might be that experiencing difficulty is not the same thing as being socially rejected or isolated. Indeed having friends but being unsure about keeping them may represent a stress or tension which contributes to making life uncomfortable for these pupils.

An alternative conceptualization would be that the SP's difficulty in making (or perhaps maintaining) friendship may be that he is dependent on the available group rather than more openly (and competently?) seeking other encounters. The difference may be construed as one of choice of strategy to deal with the problem. Faced with friendship concerns some SP boys may retreat from the situation while the AA's (or at any rate a sub group) may be able to preserve school attendance by fulfilling their friendship needs elsewhere. The notion of the probability of particular strategies being used by different groups or boys/girls may prove to be a fruitful area for future research.

Further exploration of the differences among the pupils in the various groups is possible via the approach of examining the correlations between V131 (the number of friends who do not attend the childs own school) and V128 (the number of positive nominations received on the sociometric instrument). These data are available for the AA, DA and CON groups for both boys and girls but not for the SP group of either sex.

Though the pattern of findings here is a little erratic they are none the less illuminating. For AA boys there is a highly significant correlation between nominations received and number of friends not in their school (N=20, r=-.662, p=.002). This is not however so with AA girls (N=13, r=-.32, p=.141) though the negative sign is in accord with prediction.

Basically these correlations indicate that the more often a pupil is chosen in the various positive categories eg to sit beside or go on holiday with the less likely he or she is to claim lots of friends from other schools. The same direction of effect but with a lower level of significance was found for DA's. Here the correlation for boys is -.259 (N=43, p=.046) and for girls r= -.302 (N=46, p=.021). No significant correlation in either direction was found for CON boys (N=83, r=.049, p=.330) but there was a significant trend for CON girls N=92, r=.163, p=.059).

Since the number of positive nominations received is not known directly to the pupils themselves this finding may mean that there is something of a need/actuality discrepancy which is perceived by the pupils. Thus a pupil with a high need for friends whether as a protection against bullying (or for any other reason) and who feels that he or she has not got a sufficient number in school may seek such contacts elsewhere.

That the perception of what is happening in school is not simply a matter of overt rejection by other pupils can be seen in the fact that *no significant correlations* were found between the total number of negative nominations received and number of friends from other schools for boys. However the situation with girls is somewhat different with a significant correlation for CON's (N=92, r=.175, p=.048) and a trend for DA's (N=46, r=.203, p=.088).

It must be said however that, with the exception of the situation with the correlation of -.662 between positive nominations and number of friends not in school for AA boys, that the actual size of the correlations reported is very small. It would therefore be foolish to place much emphasis in this alone. It does however serve the purpose of highlighting aspects of the reality base of friendship situations which will be explored more fully later.

The most credible model on the basis of the present (limited) data is that anxieties associated with going to school in conjunction with maintained attendance at school heightens the need for friends among some pupils and this may lead to the pursuit of friends elsewhere. If, for whatever reason, this strategy does not occur or is otherwise unavailable then school could be a specially threatening place to be. Much more work awaits to be done here. It may be that the quality of friendship (ie the match between a child's requirements/needs and what is on offer is part of the explanation.

HYPOTHESIS 3c

This hypothesis states that the four groups will differ in terms of a specially created Vulnerability in School variable (abbreviated to Vulsch). The predicted direction is that the more anxious pupils in regard to school attendance will have a greater sense of vulnerability in school.

Initial exploratory Factor Analysis of the pupil questionnaire data for boys using oblique rotation extracted 4 significant factors. This Factor Analysis is fully reported in the RESEARCH DESIGN AND METHODOLOGY section .

The third of the factors which emerged in the above analysis loaded significantly on the questionnaire items listed below. This factor which accounts for 14.9% of the variance was labelled Vulnerability in School since most of the items are negative and either explicitly involve threat such as feeling bullied or refer to situations in which it is likely that pupils might feel more vulnerable eg showering. The questionnaire items and their factor loadings are recorded in Table (72).

Table (72) Pupil Questionniare items which contribute to the Vulnerabliity in School variable together with factor loadings

V14	I am sometimes teased at school	.434
V16	Sometimes I feel afraid of my teacher	.303
V18	Sometimes I become worried or frightened without any special reason	.476
V19	This class is too badly behaved for me to get any proper work done	.479
V22	I don't like changing for games or having showers in school	.373
V25	I am sometimes bullied in school	.309
V26	Sometimes I worry that something could happen to my mum or dad while I'm in school	.563
V67	Seriousness of fears	.330

The new variable Vulnerability in school (VULSCH) was created by summing the unweighted scores on these questionnaire items. The maximum score range is from 8 which would mean maximum vulnerability to 40 which would indicate the absence of such vulnerability.

Table (73) records the means, standard deviations, standard errors and ranges on Vulsch for each of the 4 groups.

Table (73) Vulsch: Means, Standard Deviations, Standard Errors and Ranges

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	MIN	MAX
SP	30	25.23	5.3	.97	13	36
AA	21	23.71	3.8	.83	17	33
DA	44	26.22	4.6	.69	17	33
CON	88	27.96	5.2	.56	15	40

NB low scores represent higher vulnerability

Group differences on Vulsch were investigated using One way Analysis of Variance. Table (74) presents the results of this analysis.

Table (74) One Way Analysis of Variance Vulsch by Group

SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB
BETWEEN GROUPS	3	401.16	133.72	5.38	.0014
WITHIN GROUPS	179	4450.3	24.87		
TOTAL	182	4851.4			

The above analysis clearly confirms that there are significant differences among the group means. In order to help with the process of teasing out where the most important differences lie a posteriori contrasts to compare all six possible pairs of group means among the four groups was undertaken. Due to unequal group sizes Scheffe's Test was employed. The results are presented in table (75).

Table (75). 't' test comparisons among the six pairs of groups on the variable VULSCH.

VULSCH	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
t=	1.191		-.833		-2.44		-4.24		-3.32		-1.94	
df=	49.0		56.4		50.0		40.8		47.2		97.3	
p=	.239		.408		.018*		.000*		.025*		.055	

*significant at or beyond .05 level

It may be of some interest to look separately at the 8 questionnaire items which constitute the Variable VULSCH. Appendix (15) presents the results of a Chi Square analysis of this data by group membership. Here significant differences are found only on feeling teased (Chi Sq 12.3, df 3, p .006), worry for no reason (Chi Sq 25.2, df 3, p .0000) and feeling bullied (Chi Sq 10.5, df 3, p.014).

SUMMARY - BOYS

A new variable Vulnerability in School (VULSCH) was created from pupil questionnaire items based on a factor analysis of this data. The hypothesis that the more anxious the child in regard to school attendance the greater the sense of vulnerability to school was confirmed for the school attending groups.

The AA group was found to be the most vulnerable in the school setting. They differed significantly from CON's and DA's. The CON group displayed least vulnerability. There was also a very strong trend for the DA's to differ from CON's - in the predicted direction.

Chi Square analysis of the component questionnaire items of VULSCH indicates significant differences among the groups in terms of feeling bullied and teased (in the direction of the more vulnerable pupils reporting this more often) and very highly significant differences on the 'Worried or frightened without any special reason' item in the direction of a much higher proportion of the more anxious groups reporting this. Interestingly no significant differences were found in terms of anxiety regarding mothers and fathers while the pupils are at school.

GIRLS

Exploratory factor analysis of the pupil questionnaire for girls using an oblique rotation extracted 4 significant factors (see section on RESEARCH DESIGN AND METHODOLOGY for a full report of this factor analysis). The third of the factors extracted was made up of the questionnaire items listed below. This factor which accounts for 14.9% of the variance was labelled Vulnerability in School (Vulsch) as with the related factor with boys.

It must be noted that this factor, while very similar to the VULSCH factor for boys, is not identical with it. With boys this factor has two fewer variables namely V21 'Sometimes I feel that I have no one I can really talk to' and V27 'I am usually happy at home'. (With boys V21 loads on Factor 4 related predominantly to a sense of social isolation in the school context and V27 loads on the General Satisfaction with School factor). It was felt however that the major items in the factor for boys and girls are so close that it would be more misleading to give it a different name. However the differences in compositon must be noted.

Table (76) lists the constituent questionnaire items and their related factor loadings. These are listed in order of appearance of variables rather than rank positioning of the factor loadings.

Table (76) Pupil Questionnaire items constituting VULSCH with factor loadings - GIRLS

V14	I am sometimes teased at school	.541
V18	Sometimes I become worried or frightened without any special reason	.424
V19	This class is too badly behaved for me to get any proper work done	.576
V21	Sometimes I feel I have no one I can really talk to	.613
V25	I am sometimes bullied in school	.460
V27	I am usually happy at home	.366

It is helpful to gain a general overview of this data. Table (77) records the means, standard deviations standard errors and ranges on Vulsch for each of the 4 groups of girls. Recall here that a low score indicates a high degree of vulnerability in school. A score of 6 here would mean maximum vulnerability and a score of 36 the absence of vulnerability.

Table (77) Vulsch: Means, Standard Deviations, Standard Errors and Ranges - GIRLS

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	MIN	MAX
SP	19	20.26	2.84	.652	10	24
AA	17	18.88	4.76	1.150	10	26
DA	49	21.02	4.57	.653	11	28
CON	108	22.63	4.07	.392	13	30

Group differences among the girls on the variable VULSCH were investigated using One Way Analysis of Variance.

Table (78) One Way Analysis of Variance Vulsch by group- GIRLS

SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	291.76	97.25	5.59	.001
WITHIN GROUPS	189	3287.3	17.39		
TOTAL	192	3579.0			

This confirms that there are significant differences among the group means. To explore this further a posteriori contrasts to compare all 6 possible pairs of group means among the 4 groups were computed using Scheffes Test.

Table (79) 't' test comparisons among six pairs of groups on variable VULSCH - GIRLS

VUL-SCH	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
t=	1.04		-.820		-3.12		-.307		-1.6		-2.12	
df	25.5		52.4		32.6		19.8		26.9		83.8	
p	.308		.416		.004*		.006*		.119		.037*	

*significant at or beyond the .05 level

The above table indicates that SP's significantly differ from CON's but not from any other group. AA's and DA's also differ from CON's.

It is of some interest to look separately at the questionnaire items which constitute VULSCH. An analysis of the constituent items by group membership is reported in Appendix (16).

This analysis reveals that there are statistically significant differences on only two of the variables. Firstly there is the 'worry for no special reason' variable where 73% of SP girls respond in the affirmative compared with 58% of AA's, 41% of DA's and 20% of CON's (Chi Sq 37.8, df 6, p .0000).

Secondly there is the 'feeling bullied' variable. No SP girl reports feeling bullied whereas this is reported by 41% of AA's, 18% of DA's and 9% of CON's (Chi Sq. 18.7, df 6, p .004).

SUMMARY - GIRLS

The hypothesis that more anxious pupils in regard to school attendance would experience greater levels of vulnerability in the school setting was borne out for girls who are attending school. That is to say the AA group proved to be the one experiencing the greatest sense of vulnerability. In this they differed very significantly from CON's who experience least vulnerability. DA's also differ significantly from CON's in the predicted direction with DA's being more vulnerable.

Against prediction SP's proved less vulnerable than AA's though the difference did not reach statistical significance. Nor is the difference between SP's and DA's significant though once again the direction of effect was as predicted. SP's do, however, differ significantly from CON's.

Chi Square analysis of the component questionnaire items making up VULSCH for girls indicated very highly significant differences on the 'worried or frightened without any special reason' item - this being reported by 73% of SP's, 58% of AA's, 37% of DA's and 20% of CON's. Surprisingly no SP girl reports feeling bullied but 41% of AA girls do, together with 18% of DA's and 9% of CON's. There was a trend towards significance on the 'feeling teased' variable. Feeling teased was reported by 27% of SP's, 47% of AA's, 37% of DA's and 35% of CON's.

DISCUSSION BOYS AND GIRLS

Though there is a high level of face validity in the argument that pupils who are anxious about school attendance are likely to feel more vulnerable in that setting it has not always seemed so to workers in the field. Some, particularly those who espouse a separation anxiety aetiological model, feel that the school setting itself may be unimportant (Waldfogel et al 1956, Eisenberg 1958). However a number of other workers from a diverse range of viewpoints highlight the need to look at the school situation (Eynenck and Rachman 1965, Minuchin 1970, Bolman 1967). If one listens to the views of the pupils themselves then at least a wary eye should be cast on the school features (Goldenberg and Goldenberg 1970, Hersov 1960, Heath 1983).

The specially created Vulnerability in School (VULSCH) variable is characterized by features relating to worry/anxiety/fears in relation to self. The items do not explicitly address the question of academic success or failure. Such issues are of considerable importance and are dealt with in the next sub-hypothesis.

Since the essential features of the 'VULSCH variable are the same for both sexes the same label is applied. One must however be somewhat wary in interpreting outcomes as the composition for boys and girls is not identical and some of the differences may have oblique importance.

The most surprising initial finding from the exploration of the VULSCH variable is that the SP group is not the most vulnerable on this measure for either boys or girls. However the mean scores on VULSCH are very much in the predicted direction for the school attending pupils. It may be that the vulnerability of the anxious child who is actually attending school is kept at a higher level by regular exposure to the school setting. No control was possible in the SP group for length of time out of school or stage of treatment. This is a common failing in published research and makes valid interpretation more difficult.

It is interesting to note however that neither SP boys or girls differ significantly from AA's or from DA's in respect of vulnerability in school. SP's do differ significantly from CON's. AA boys differ from both DA's and CON's but AA girls differ only from CON's. There is a very strong trend for DA boys to differ from CON's in the predicted direction of DA's displaying more vulnerability. The result from DA girls is in the same direction and is clearly statistically significant.

Examination of Appendices (15 & 16) which explore the specific questionnaire items is of some interest. A very high proportion of boys feel teased in school - this ranges from 51% for CON's to 80% for DA's. Feeling bullied which might reasonably be regarded as a more extreme reaction is reported by almost half of SP and AA boys but by fewer than a quarter of DA and CON boys.

However among girls a very different picture emerges. No SP girl reports bullying but 41% of AA's so report (as do 18% of DA's and 9% of CON's). It may be that, though being teased and bullied load on the same factor for girls and boys considered in an overall sense, that these variables stand in a different relationship within the various sub groups of boys and girls. It may not be wise to consider that the relationship between being teased and bullied is that the former is a milder form of the latter. Unfortunately there is an insufficient number of subjects in each subgroup to permit separate factor analyses.

The correlation between V14 'being teased' and V25 being bullied' is positive and statistically significant for the CON groups of both sexes. (Boys N=85, r=.404, p=.000 and Girls N=105, r=.272, p=.002). This is an unexceptional finding which is in accord with common experience and indicates that pupils who feel that they are teased also tend to feel bullied.

A similar picture emerges for DA's. Here the correlation for boys is .394 (N=44, p=.004) and for girls r=.533 (N=49, p=.000). However the pattern changes with AA's. There is a trend toward significance with AA girls (N=17, r=.389, p=.061) but not with AA boys (N=21, r=-.088, p=.351). This difference is reversed and considerably amplified between the SP groups. Among SP girls the correlation between being teased and bullied is -.204, (N=19, p=.200). Among SP boys the correlation is a very high .78 (N=30, p=.000).

The implication of these findings is that for various sub groups the nature and range of associations which may underpin at least part of the psychological reality for the pupils is different. It seems that somehow SP boys become supersensitized to perceive any non-positive social encounter from peers as more likely to be be threatening.

It is clear that further work is needed to clarify these issues. It might be that the use of attributional theory would provide a way forward (Weiner 1979, Kelley and Michela 1980). The question in this framework becomes one of whether the groups involved differentially attribute success or failure in various domains to different sources. If some groups attribute being teased and bullied to different causes than we would not expect other than a chance relationship to occur on a self-report questionnaire.

If however such feelings as being teased and bullied are attributed to a single common cause then the association would not be at chance level but would be strong. Present data do not permit a test of this hypothesis though clinical experience indicates that, at least for a sub-group of SP's, there is a more pervasive sense of not being understood even by themselves. They are frequently alarmed by the suddenness and crippling nature of their own symptoms for which thay are at a loss to account.

The hypothesis in an attributional analysis would be that AA's, DA's and CON's would have clearer (if different) causal attributions for their feelings but that SP's would either have none or a very loose means of accounting for their feelings and reactions with a consequent heightening of alarm.

The sense of being unable to account for things is to some extent borne out in the very highly significant finding on the investigation of the questionnaire item 'sometimes I become worried or frightened without any special reason'. Such a non-specific anxiety is reported by 50% of SP boys and 73% of SP girls. It is also reported by 39% of AA boys and 58% of AA girls. The pattern continues with DA boys among whom 32% report this feeling as do 41% of DA girls. The figures drop considerably with the CON's. Only 9% of CON boys and 20% of CON girls report this.

It is worth highlighting that the direction of findings is as would be predicted from the above indicated attributional hypothesis. The same pattern emerges for both boys and girls though the incidence varies. There is of course always the problem of direction of cause. Do pupils anxious about attending school become more prone to general anxieties and worries or do those individuals who experience more general anxiety become more prone to anxiety in regard to school attendance. Unfortunately present data do not permit an easy resolution of this question. Exploration of subsequent hypotheses may hopefully throw some light on these issues.

HYPOTHESIS 3d

This hypothesis states that the four groups will differ on the specially created 'General Satisfaction with School' variable. The predicted direction being that the more anxious pupils will report less satisfaction with school.

Initial exploratory Factor Analysis of the pupil questionnaire data for boys using an oblique rotation extracted 4 significant factors (See the section headed RESEARCH DESIGN AND METHOLOLOGY for a full account of this Factor Analysis). The first of the factors to emerge loaded significantly on the questionnaire items listed below.

This factor, which accounts for some 42.6% of the variance, was labelled General Satisfaction in School since most of the items involve pupils reporting satisfaction from their own point of view or the belief that their parents or teachers regard them positively in relation to their standard of workand their behaviour in school. Table (80) lists the questionnaire items and their factor loadings for Boys. This is a closely similar factor to Factor 2 in the analysis of the girls data where the same items emerge as relevant with the omission of V27.

Table (80) Pupil Questionnaire items which contribute to the General Satisfaction with School variable together with factor loadings

V8	I am usually satisfied with my own behaviour in school	.417
V10	My parents are usually satisfied with my behaviour at home	.633
V13	I am usually satisfied with the standard of my own work in school	.469
V15	My parents are usually satisfied with the standard of my work in school	.672
V17	My teachers are usually satisfied with the standard of my work in school	.538
V20	I like school	.642
V24	My teachers are usually satisfied with the standard of my behaviour in school	.727
V27	I am usually happy at home	.462

Table (81) records the means, standard deviations, standard errors and ranges on GenSatSch for each of the 4 groups. GenSatSch was created by summing the unweighted scores on these questionnaire items. The score range is from 8 which would indicate the least satisfaction to 40 which would indicate maximum satisfaction.

Table (81) GenSatSch: Means, Standard Deviations, Standard Errors and Ranges

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	MIN	MAX
SP	30	31.00	5.69	1.04	18	38
AA	21	32.52	3.74	.82	24	38
DA	44	34.14	3.31	.5	27	39
CON	88	31.28	5.83	.62	11	40

Group differences in GenSatSch were investigated using One Way Analysis of Variance. Table (82) presents the results of this analysis.

Table (82) One Way Analysis of Variance GenSatSch by Group

SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	280.9	93.63	3.61	.014
WITHIN GROUPS	179	4842.3	25.93		
TOTAL	182	4923.2			

This analysis indicates that there are significant differences among the group means.

In order to evaluate where the significant differences lie a posteriori contrasts to compare all six possible pairs of group means was undertaken. Scheffe's Test was employed as the group sizes are unequal.

Table (83) 't' test comparisons among the six pairs of groups on the variable GenSatSch - BOYS

GenSat Sch	SP AA	SP DA	SP CON	AA CON	AA DA	DA CON
N=	30 21	30 44	30 83	21 83	21 44	44 83
t=	-1.15	-2.72	-0.23	1.21	-1.69	3.58
df=	48.9	42.4	51.3	46.4	35.5	127.8
p=	.245	.009*	.815	.233	.101	.000*

* significant at or beyond the .05 level

It is clear that the significant differences lie between the DA's and each of SP's and CON's.

A Chi Square analysis of the individual items which constitute GenSatSch reveals significant differences on 4 of the 8 items namely feeling satisfied with ones own behaviour in school, feeling that ones parents are satisfied with home behaviour and that teachers are satisfied with both behaviour and the standard of school work achieved. The full results of this analysis are presented in Appendix 17.

SUMMARY OF RESULTS - BOYS

A new variable General Satisfaction with School (GenSatSch) was created from a factor analyis of the pupil questionnaire data. It was hypothesized that the more anxious the child in regard to school attendance the less general satisfaction they would report in regard to the school situation. This hypothesis is not confirmed.

No significant differences were found between the SP and CON groups - where the prediction is that maximum differences would occur. Nor did AA's differ from CON's. The DA group achieved the highest satisfaction with school scores and differs significantly from SP's and CON's but not AA's.

Chi Square analysis of the component Questionnaire items of GenSatSch indicates significant differences among the groups on 4 of the 8 variables with two strong trends. Of these the direction of effect was as predicted only in terms of the pupil's view of his parent's level of satisfaction with his behaviour at home - the most problematic item it terms of naming the factor.

GIRLS

The initial exploratory analysis of pupil questionnaire data for girls also extracted four factors by oblique rotation. These factors however are not identical for boys and girls (This factor analysis is fully reported in the section headed RESEARCH DESIGN AND METHODOLOGY . With the girls the variables listed below loaded significantly on Factor 2.

Factor 2 accounts for 33.1% of the variance. In includes the idential range of items as the General Satisfaction with School factor with Boys with the omission of V27 'I am usually happy at home'. With girls this variable did load .316 on GenSatSch but also .366 on the Vulnerability in school measure.

It was felt that the similarities were so great however that to use a different name for the factor would be more misleading - thus this factor is also called GenSatSch with the girls' groups.

As with boys the variable GenSatSch was created by summing the unweighted scores of the items on the constituent items in the factor. Here the score range is from 7 which indicates the least general satisfaction with school to 35 which indicates the highest level of satisfaction. Table (84) lists these items with their factor loadings.

Table (84) Pupil Questionnaire items which contribute to the General Satisfaction with School Variable together with factor loadings - GIRLS

V8	I am usually satisfied with my own behaviour in school	.415
V10	My parents are usually satisfied with my behaviour at home	.453
V13	I am usually satisfied with the standard of my own work in school	.483
V15	My parents are usually satisfied with the standard of my work in school	.672
V17	My teachers are usually satisfied with the standard of my work in school	.533
V20	I like school	.375
V24	My teachers are usually satisfied with the standard of my own behaviour in school	.584

As with the boys' data, the items on this factor are relatively easily interpreted and named. The exception to this remains V10 regarding satisfaction at home. Prevailingly however the sense is of being satisfied with ones own school situation and of feeling that significant others are also satisfied.

Table (85) records the means, standard deviations, standard errors and ranges on GenSatSch for each of the 4 groups of girls.

Table (85) GenSatSch: Means, Standard Deviations, Standard Errors and Ranges

GROUP	N	MEAN	STANDARD DEVIATION	STANDARD ERROR	MIN	MAX
SP	19	26.73	4.33	.99	14.00	34.00
AA	17	25.00	5.07	1.23	19.00	36.00
DA	49	23.87	3.95	.56	15.00	31.00
CON	108	25.25	3.56	.34	16.00	32.00

NB Higher scores indicate more satisfaction

Scheffes test for significances of ranges indicates that no two groups significantly differ at the .05 level.

Whether there are significant differences among group means was further investigated using One Way Analysis of Variance.

Table (86) One Way Analysis of Variance GenSatSch by Group - GIRLS

SOURCE	DF	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	126.10	42.04	2.774	.0427
WITHIN GROUPS	189	2863.67	15.15		
TOTAL	192	2989.78			

The analysis reported in table (86) reveals that there are overall significant differences among the group means. In order to evaluate where the significance lies a posteriori contrasts were undertaken to compare all 6 possible pairs of means. Scheffes test was employed as group sizes are uneven.

Table (87) 't' test comparisons among the six pairs of group means on the variable GenSatSch

GenSat Sch	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
t=	1.09		2.50		1.40		-.203		.829		-2.08	
df=	31.70		30.30		22.50		18.60		23.10		84.80	
p=	.280		.018*		.173		.841		.416		.04*	

* significant at or beyond the .05 level

It is clear from this table that the significance lies in the differences between means of SP's and DA's and between DA's and CON's.

It is of some interest however to examine the 7 questionnaire items which make up GenSatSch separately for the girls groups. Appendix (18) presents the results of a Chi Square analysis of these data.

It can be seen from these figures that statistically significant differences are found on the 'being satisfied with ones own behviour in school' variable and the 'feeling that teachers are similarly satisfied with their behaviour in school'. There are also three trends towards significance namely on the 'feeling that parents are satisfied with their behaviour at home' variable and 'being satisfied with the standard of their own work in school' and 'feeling that teachers are satisfied with their school work'.

SUMMARY OF RESULTS - GIRLS

A new variable General Satisfaction with School (GenSatSch) was created. It was hypothesized that more anxious pupils would be less satisfied. This hypothesis was not confirmed. No significant differences were found between the SP and CON groups - these being the groups where the maximum difference was predicted. Indeed SP girls had a higher mean GenSatSch score. Nor was it found that the AA girls differed significantly from CON's or AA's from SP's.

Chi Square analysis of the component questionnaire items of the GenSatSch scale indicates significant differences on two variables with three strong trends. Even here the direction is not as predicted with a higher proportion of SP's reporting satisfaction with their own behaviour in school. A higher proportion of SP's also felt that their teachers were satisfied with their behaviour.

DISCUSSION BOYS AND GIRLS

A number of writers have implicated reaction to (or anxiety about) either teachers or difficulties with school work in the constellation of problems presented by SP's (Kline 1945, Tyerman 1958, Hersov 1960).

In how far can the variable here named GenSatSch be seen as reflecting self esteem as a learner or pupil is hard to gauge. Certainly at face value the constituent items of the variable connote a positive attitude as to how these pupils see themselves and how they feel others see them.

Some workers see such self esteem as an important variable (Levanthal and Sills 1964, Radin 1967, Waldron et al 1975). These writers all feel that the SP child has unrealistically high self esteem which is challenged by the harsh realities of school life. However others persuasively dispute this and demonstrate on their measures that self esteem is lower among school phobics (Nichols and Berg 1970, Heath 1983).

The striking features of the findings in the present study for both boys and girls are the lack of significant differences between the SP and CON groups and between the SP's and AA's. This is quite against prediction though it is in line with other work which failed to find differences on a specially constructed Anxiety in the Classroom and Fear of Failure Scales (Heath 1983).

The basic prediction in the present study was that CON's would have the highest general level of satisfaction with school since they do not report any anxiety in regard to school attendance which might interfere with or impair their enjoyment. The findings of this study however suggest that among boys it is the DA group which appears to gain most satisfaction from school while even more surprisingly among the girls it is the SP group who have the highest score.

It is relevant here to recall that for both boys and girls the SP and DA groups differ significantly from each other in terms of age and ability in the direction of the SP's being younger and somewhat lower in ability. It may be that besides the age and ability advantage, that the moderate general level of anxiety experienced by the DA boys functions to motivate the individual to work and that the consequences of this effort in terms of success gives satisfaction.

This is in line with the general findings in regard to anxiety and attainment (Eysenck and Cookson 1969, Wade 1981). However if this is pursued it is necessary to highlight the sex difference since, among girls, it is the DA's who have the lowest satisfaction with school score. This again might be a situation in which an attributional analysis could prove to be of relevance for future research in this area.

If DA's girls attribute success and satisfaction to factors outside their own ability and general issues within their control then the potential for increased motivation from moderate degrees of anxiety would be diminished.

The situation in regard to interpreting the high satisfaction with school among SP girls however suggests that the 'causes' of the anxiety are not attributed to those aspects of school life tapped by this scale. That it is not simply a matter of SP's having acquired a benign retrospective view of school can be seen in the lack of significant finding in regard to the differences between AA's and CON's. Here both groups are attending school but the anxious group does not score significantly lower than the anxiety free group on the GenSatSch measure.

Examination of Tables (80 & 84) looking at the specific questionnaire items which constitute GenSatSch reveals that only four of the items produce significant differences for boys and two for girls. Items involving satisfaction with behaviour in school rather than work tend to be more highly significant for both boys and girls. Note however that among boys, SP, AA and CON groups are rather similar in terms of satisfaction with behaviour at school both from their own self view and perceptions of how teachers see them. The main difference seems to reside with the DA group where a very much higher proportion of boys report being satisfied with their own behaviour in school.

A very different picture again emerges with girls. Here it is among the SP's that a significantly higher proportion report satisfaction with their own behaviour in school. Almost twice as many SP's as AA's have this view.

Examination of the AA groups for both boys and girls reveals that they are less likely than the other groups to feel that teachers are satisfied with their school work and less likely to like school. Interestingly 91% of the AA boys group feel that their parents are satisfied with their home behaviour compared with only 47% girls.

While no additional data are available to provide a 'reality' test in regard to the parents views, Rutter Scale data are available from the teachers on n=16 AA's, n=39 DA's and n=82 CON's among the boys and n=17 AA's, n=43 DA's and n=103 CON's among the girls. These scales permit the calculation of separate 'Neurotic' and 'Antisocial' scores (Rutter 1967). No significant differences were found in the mean scores among the groups (Appendix 19). If one regards the teachers' views represented by this measure as reflecting the daily reality it appears that any significant differences are related to pupils self-perceptions rather than direct feedback from the teachers.

It is clear that difficulties relating to school work and teachers are not major, systematic sources of group differences. It is therefore now appropriate to pursue the question of a anxieties in relation to peer relations.

HYPOTHESIS 3e

This hypothesis states that the groups will differ in terms of their sociometrically defined status with their peers. It is predicted that the more anxious pupils will be overall less popular and more prone to rejection.

Sociometric data are available for the AA, DA and CON groups but not for SP's. These data take the form of peer nominations on the following dimensions. Rank order of which pupils in class they would most like to Sit beside, Ask for help with work, Trust to tell a secret to, Like to go on holiday with. After each section the negative aspects were tapped by asking each pupil to say whomhe would least like to sit beside etc. Scoring was in terms of the number of nominations each pupil received in each category. First three nominations in each category were separately scored from fourth and subsequent. Nominations in first three places either positively or negatively are regarded as STRONG while nominations in fourth or subsequent places are regarded as WEAK.

The results of testing hypothesis 3a confirmed the importance of friendship difficulties. What needs to be clearer is the extent these difficulties reflect individual perceptions of their friendship status and how much is based in the reality of the classroom's social organization.

RESULTS - BOYS

In order to evaluate the degree to which sociometric choice and rejection data would permit discrimination among the three groups upon whom these data are available a Discriminant Function Analysis was undertaken. The results of the subsequent Classification table are presented in table (88).

Table (88) Classification Analysis - Sociometric Data

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	20	15 75%	3 15%	2 10%
DA	41	7 17%	23 56%	11 27%
CON	76	17 22%	17 22%	42 55%
PERCENTAGE CORRECTLY CLASSIFIED 58.39%				

These results indicate that it is worth pursuing this dimension. Certainly the AA group is correctly classified in a very high proportion of cases.

Exploratory Factor Analysis of the sociometric data using an oblique rotation extracted 4 significant factors. Table (89) presents the results of this analysis.

Table (89) Sociometric dimensions and factor loadings - BOYS

	VARIABLES	Loadings
F A C T O R 1	V114 Rejected to sit beside (strong)	.799
	V118 Rejected as source of help (strong)	.886
	V122 Rejected as trustworthy (strong)	.798
	V126 Reject to holiday with (strong)	.950
	(Factor 1 accounts for 44.9% of the variance)	
F A C T O R 2	V112 Chosen to sit beside (strong)	.945
	V116 Chosen to ask for help (strong)	.780
	V120 Chosen as trustworthy (strong)	.944
	V124 Chosen to holiday with (strong)	.292
	(Factor 2 accounts for 25.5% of the variance)	
F A C T O R 3	V113 Chosen to sit beside (weak)	.609
	V117 Chosen to ask for help (weak)	.339
	V121 Chosen to trust (weak)	.484
	V125 Chosen to holiday with (weak)	.807
	V128 Total number positive nominations	.500
	(Factor 3 accounts for 17.6% of the variance)	
F A C T O R 4	V115 Reject to sit beside (weak)	.624
	V119 Reject as source of help (weak)	.655
	V123 Reject as trustworthy (weak)	.552
	V127 Reject to holiday with (weak)	.825
	(Factor 4 accounts for 12% of the variance)	

NB STRONG means nominated in first 3 rank positions

WEAK means nominated in 4th or subsequent position

Factors 1 and 2 were chosen to create two new variables. The scores on the constituent items of Factor 1 were summed to create a Rejection Score and those of Factor 2 to create a Popularity score. Table (90) presents the results of 't' test analysis of Rejection.

Table (90) 't' test comparisons of the 3 pairs of groups means on variable Rejection

	AA	CON	AA	DA	DA	CON
N=	20	83	20	42	42	83
X	7.0	9.3	7.0	7.5	7.5	9.3
SD	12.3	9.49	12.3	10.5	10.5	9.49
t	-.92		-.17		-.95	
df	101		60		123	
p	.362		.863		.342	

Though visual inspection might lead one to expect that the obtained differences are significant particularly in regard to the unexpectedly higher mean Rejection Score for the CON group the obtained 't' value with 101 degrees of freedom did not prove statistically significant. It is clear from the present analysis that there are no significant differences among the means of the three groups on this variable.

The results from the analysis of the Popularity variable are presented in table (91). The scores here are produced by summing the obtained scores on the variables which constitute Factor 2. This is labelled Popularity.

Table (91) 't' Test comparisons of the three pairs of group means on the variable Popularity -BOYS

	AA	CON	AA	DA	DA	CON
N	20	87	20	44	44	87
X	8.0	7.54	8.0	7.4	7.4	7.54
SD	4.95	5.18	4.95	6.84	6.84	5.18
t	.36		.35		-.11	
df	105		62		68.73	
p	.719		.730		.911	

As with Rejection there is no significant difference among the various group means in terms of Popularity.

Though no differences appear to exist at the level of group means it may still be helpful to investigate the extent to which the same relationship exists in each group between friendship effort (motivation) and friendship yield (reward/outcome). Friendship yield is here assessed by the total number of positive nominations the individual receives (V128), while friendship effort is assessed by the number of friends laid claim to (V130). In general one would predict a positive correlation between these two variables. Table (92) presents the results.

Table (92) Correlation between number of positive choices received and number of friends.

	N	r	p
AA	20	-.178	.226
DA	43	-.221	.078
CON	84	.189	.042*

*significant at or beyond .05

SUMMARY - BOYS

Sociometric choice and rejection data exist for AA's, DA's and CON's. Discriminant Function Analysis indicates that these data can reliably classify group membership in approximately 58% of cases. 75% of AA's are correctly classified.

Factor Analysis reveals four factors the first two of which were used to construct Rejection and Popularity measures. 't' tests among the means of these new variables failed to reveal any significant differences. However examination of the correlation between number of friendships laid claim to (friendship effort) and number of positive nominations (friendship yield) reveals a small positive correlation for CON's but negative and non-significant correlations for AA's and DA's.

RESULTS- GIRLS

Separate Classificatory Analysis (*following Discriminant* Function Analysis) was undertaken for the Girls using the data from the sociometric choice and rejection instruments.

The table below reports the results. NB Sociometric data only available for AA, DA and CON groups.

Table (93) Classification of Groups by sociometric data - GIRLS

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	12	9 75%	2 16.7%	1 8.3%
DA	45	6 13.3%	22 48.9%	17 37.8%
CON	88	13 14.8%	19 21.6%	56 63.6%
PERCENTAGE CORRECTLY CLASSIFIED 60.0%				

This is a good level of classificatory accuracy. It clearly indicates that it is worth pursuing this dimension for girls. Note that the AA girls are correctly classified in a high proportion of cases.

Exploratory factor analysis of the sociometric data for girls using an oblique rotation extracted 4 factors. Note that though this is the same number of factors as with boys there are differences in the factor structure as a function of sex of subject. Table (94) presents the results of this analysis plus factor loadings.

Table (94) Sociomentric dimensions and factor loadings

	VARIABLE		Loadings
FACTOR 1	V114	Rejected to sit beside (strong)	.959
	V118	Rejected as source of help (strong)	.834
	V122	Rejected as trustworthy (strong)	.584
	V126	Reject to holiday with (strong)	.919
	(Factor 1 accounts for 51.3% of the variance)		
FACTOR 2	V112	Chosen to sit beside (strong)	.621
	V113	Chosen to sit beside (weak)	.459
	V116	Chosen to ask for help (strong)	.433
	V117	Chosen to ask for help (weak)	.496
	V120	Chosen as trustworthy (strong)	.659
	V121	Chosen as trustworthy (weak)	.563
	V124	Chosen to holiday with (strong)	.644
	V125	Chosen to holiday with (weak)	.452
	V128	Total number of positive nominations	.363
	(Factor 2 accounts for 21.5% of the variance)		
FACTOR 3	V130	Total number of friends	.690
	V131	Numbers of friends not from school	.969
	(Factor 3 accounts for 16.6% of the variance)		
FACTOR 4	V115	Reject to sit beside (weak)	.669
	V119	Reject as source of help (weak)	.614
	V123	Reject as trustworthy (weak)	.471
	V127	Reject to holiday with (weak)	.541
	V129	Total negative choices received	.304
	(Factor 4 accounts for 10.6% of the Variance)		

NB STRONG means nominated in first 3 rank positions

WEAK means nominated in 4th or subsequent place

Factors 1 and 2 were chosen to create two new variables. The constituent items of Factor 1 are identical with Factor 1 in the boys data and are given the same name -REJECTION.

However Factor 2 in the analysis of the girls' data is a combination of Factors 2 and 3 of the boys' data. It would therefore be misleading in this case to call it by the same name. This factor is here given the name ACCEPTANCE.

Table (95) presents the results of 't' test analysis of the Rejection variable.

Table (95) 't' test comparisons of the 3 pairs of group means on the variable Rejection - GIRLS

	AA	CON	AA	DA	DA	CON
N=	13	92	13	45	45	92
X	14.8	6.46	14.8	5.5	5.5	6.46
SD	15.02	8.03	15.0	6.8	6.8	8.03
t	1.97		2.18		-.69	
df	12.99		13.46		135	
p	.07		.049*		.494	

*significant at or beyond the .05 level

The only significant difference identified is between the AA and DA girls. Here the mean AA Rejection score is significantly higher than the DA Rejection score. There is also a strong trend toward significant difference between the AA and CON girls. Once again this is in the direction of the AA's having a higher Rejection score.

The results from the analysis of the newly created Acceptance variable are presented in table (96). The scores here are produced by summing the obtained scores on the variables which constitute Factor 2.

Table (96) 't' test comparisons of the three pairs of group means on the variable Acceptance

	AA	CON	AA	DA	DA	CON
N=	14	93	14	46	46	93
X	6.71	8.21	6.71	7.69	7.69	8.21
SD	3.62	3.93	3.62	4.29	3.92	3.93
t	-1.35		-.77		-.71	
df	105		58		137	
p	.181		.442		.478	

No significant differences among the AA, DA and CON groups were found on the variable Acceptance. As with boys the relationship between friendship effort (motivation) and friendship yield (reward/outcome) was also investigated

Table (97) Correlations between number of positive nominations received (V128) and number of friends (V130).

	N	r	p
AA	13	.194	.262
DA	46	-.100	.252
CON	92	.233	.013*

SUMMARY OF RESULTS - GIRLS

Sociometric choice and rejection data are available for AA, DA, and CON's but not for SP girls.

Classification procedures following a Discriminant Function Analysis indicates that these data can reliably classify group membership in 60% of cases. 75% of AA's are correctly classified as are 63.6% of CON'S.

Factor Analysis of the sociometric data yields 4 factors by oblique rotation. Though this is the same number of factors that emerged with boys the factor structure is different with girls. The first two factors were used to create 2 new variables (1) Labelled Rejection is identical in boys and girls and (2) labelled Acceptance with girls.

't' tests reveal significant differences between AA and DA girls on Rejection with a strong trend toward significance for AA/CON - in both situations in the direction of the AA group being higher on the Rejection Scale.

No significant differences were found on the Acceptance Scale.

Examination of the correlation between number of friends laid claim to (friendship effort) and number of nominations received (friendship yield) reveals small and statistically significant correlations for CON's but not for AA's or DA's.

DISCUSSION BOYS AND GIRLS

The investiation of hypothesis 3a confirmed the importance of friendship difficulties in terms of child and parent data though not of teacher data for both boys and girls. Hypothesis 3b indicated that age and sex of friends are not strongly implicated for boys though whether friends come from their school is important for girls. Hypothesis 3c indicates the importance of a sense of vulnerability in school for both boys and girls. Investigations of hypothesis 3d suggests that this vulnerability is unrelated to satisfactions with academic work and personal behaviour. The issues raised in these hypotheses are pursued here in terms of sociometric status as a means of assessing whether the friendship difficulties are based on low popularity or outright rejection among peers.

The fact that the sociometric data can overall correctly classify 58% of AA, DA, and CON boys and 60% of AA, DA, and CON girls into their groups of origin is important. Interestingly among both boys and girls 75% of AA's are correctly classified by this analysis. The implication here is that whatever is at work cannot be accounted for wholly in terms of pupil self-perceptions. There appears to be a link with the social reality of the classroom. The question arises as to what sort of mechanism or process is at work here?

Are more anxious pupils very sensitive to possible low popularity or are they the direct victims of rejection by peers? Are some pupils unpopular and/or rejected and respond to this with anxiety about attending school?

While it may not be possible to answer all of these questions from the data in this study some clarification of issues may be possible. Separate factor analyses of the sociometric data for boys and girls reveals a very interesting set of factors and some intriguing differences in factor structure by sex of subject. Though 4 coherent factors emerge for each sex with the exception of Factor 1 labelled Rejection the structures are different.

Among boys the 2nd factor is a strong version of Popularity ie made up of being chosen among the first three on the various dimensions. With girls strong and weak aspects are combined in one general factor - here labelled Acceptance to reflect its looser structure. It is interesting to note that on the issue of Rejection for both boys and girls Strong and Weak versions emerged as entirely separate factors. With girls however there is a separate factor which does not appear to operate for boys. This is a two item factor - the items being V130 Number of friends and V131 Number of friends not in the pupil's own school.

On the basis of the above analysis a new variable Rejection was created by summing the unweighted scores on each of the four items which together constitute Factor 1 for both boys and girls. Comparison of group means on this new variable failed to establish any significant differences for boys - indeed with boys examination of the raw scores on Rejection indicated that AA's have the lowest Rejection scores with the strong implication that they may tend to be the least rejected. Their mean scores are remarkably similar to those of DA's.

However the situation is rather different for girls though it must be noted that data on AA girls is available on only n=13 pupils. AA girls differ at a statistically significant level from DA's with a trend toward significance for the difference with CON's. The direction of effect is very much that AA girls have higher Rejection scores.

One has to be careful in thinking about Rejection and Popularity/Acceptance measures. It is tempting to regard these notions as at opposite ends of one continuum. Yet there is evidence that this is not so (Hartup 1970, McMillan et al 1978). One way of investigating this using the present data is to examine the correlations among the factors. For boys the virtual absence of any correlation between Factor 1 (Rejection) and Factor 2 (Popularity) where r=-.012 implies that rejection is not simply the opposite end of a popularity continuum in which case we would have expected a significant negative correlation.

With girls a different picture emerges. The correlation between Factor 1 (Rejection) and Factor 2 (Acceptance) is -.3444. Though this does not account for much of the variance it is an appreciable relationship and in the predicted negative direction.

Since Rejection and Popularity/Acceptance are not simple opposites there is value in pursuing an analysis of the Popularity/Acceptance variable in its own right. A Popularity variable was created for boys by summing the unweighted scores on the four sociometric items which constituted Factor 2. Analysis of mean differences failed to reach statistical significance. Similarly the creation of an Acceptance score for girls by summing the 9 scores on Factor 2 did not produce any statistically significant findings.

It must be noted however that all three groups of boys have remarkably similiar Popularity scores with the mean popularity score for AA's being highest. With girls while the scores on the Acceptance measure are relatively close to one another it is the AA girls who achieve the lowest Acceptance scores.

It is clear from this analysis that neither the mean level of Rejection nor of Popularity as measured by these scales accounts for the friendship difficulties for boys. However it may be that Rejection is a more important issue with girls.

In the only other study of school phobic pupils which has come to light in which sociometric measures were used Ojanen (1980) failed to find significant inter-group differences - nor does he report sex differences. It may be that his procedure of matching clinically defined school phobics with pupils from the same class confounded the issue by not determining if these within-class controls were in themselves anxious about school. Certainly some of the results from the present study would suggest that it is at least prudent and potentially necessary to build in some such safeguard.

If the present data are looked at in terms of the correlation between friendship effort (as loosely assessed by the number of friends laid claim to) and friendship yield (as more solidly assessed by number of positive nominations received) the actual levels of correlations are fairly trivial in terms of the amount of variance accounted for among all three groups across sex. However the interpretative interest resides in the fact that the expected significant positive correlation emerged only in connection with the CON groups. The implication here is that the interpersonal dimension impinges upon the issue of anxieties in regard to school attendance.

One needs here to recall that 57% of both AA and DA boys regard few or none of their friends as coming from their school compared with only 27% of CON's and that among the girls that 35% of AA's, 17% of DA's and 20% of CON's make this claim.

In the discussion of hypothesis 3b it was suggested that pupils anxious about school and regarding themselves as having difficulty making friends might seek companionship elsewhere or at any rate have a companionship out-reach elsewhere. There is some evidence that while boys and girls both value the characteristics of ability, sociability and relationships they differ to some extent in the importance they attach to being liked (Rosenberg 1965). Girls in the Rosenberg study rating being liked as proportionately more important. It may be that if the finding of the present study that Acceptance is one loose general factor for girls, is borne out by other work, that it is this which contributes to the impact.

There is a possibility that there are sub-groups with less commitment to friendship making effort in their own school settings and that this may be intuited by their non-anxious peers and leads to differences in patterns of interaction which are too subtle to be picked up by the present measures. Alternatively it may be that it is the within school anxiety which is intuited rather than the lack of friendship effort. In an attributional study of how pupils view the causes of various types of school related problems it was found that school phobic type anxieties are attributed to psychological causes (Chassin 1983). This may lead to changes in their reactions to their more anxious peers. Considerable work would be needed to refine this notion in the present context.

Though there is little in the published work which would allow a formal resolution of these issues there are some suggestive fingings. Some feel that SP's become more withdrawn (Horowitz 1962, Gittelman-Klein and Klein and Klein 1980). Furthermore Leach (1972) found that younger pupils having difficulties entering into school activities directed less behaviour towards others and were less responsive to overtures from peers which led to a corresponding decrease in other children seeking to interact with them.

In the present study only two of the possible four new variables were created for both boys and girls. The strong forms of Rejection and Popularity/Acceptance were chosen since they not only emerged as the factors accounting for the largest amounts of the variance but have an intuitive appeal and lend themselves more readily to interpretation in the light of other research.

The investigation of hypothesis 3e indicates that there are influences and significance to sociometrically defined status which are additional to any issue of self-perceptions and that the nature of friendship choices as assessed by these means is different for boys and girls. Given this, it is now appropriate to evaluate any knock on effects (or less causually construed other manifestations or aspects) in terms of the spare time activitives availed of by the various groups. This is investigated in hypothesis 3f.

HYPOTHESIS 3f

This hypothesis states that the SP, AA, DA, and CON groups will differ in terms of their preferred spare time activity. It is predicted that the more anxious groups will have more potentially socially isolated preferences eg listening to the radio and fewer outward acting preferences eg attending clubs.

Related to this is the question of whether anxious pupils are likely or able to have and to keep a part time job. The prediction here is that the more anxious the pupil the less likely they are to have a part time job. Variable 73 (pupil questionnaire item 44) invites a yes/no response to the direct question 'Do you have a part time job?'

A further prediction is that when not in school the more anxious pupils will be physically closer to their homes. This would be in line with the notion that such pupils have a greater degree of dependence on familiar surroundings and potentially experience anxiety on separation.

Pupil questionnaire item 26 (Variables 33 to 39) is the primary source of data but some additonal data are available from the parental questionnaire.

RESULTS - BOYS

The issue of the nature of spare time activiites is tackled first from the point of view of pupil self report. Table (98) presents the results of this analysis.

Table (98) Spare Time activity by group membership

Variable	SP	AA	DA	CON	χ^2	df	p
N=	30	21	44	88			
Watching television	18 60%	13 62%	19 43%	52 59%	3.7	3	.288
Playing with friends	14 47%	10 48%	22 50%	39 44%	.395	3	.941
At a hobby or sport	7 23%	12 57%	14 32%	31 35%	6.5	3	.088
Wandering around	4 13%	1 5%	6 14%	10 11%	1.23	3	.744
Listening to records/radio	9 30%	6 29%	19 43%	42 48%	4.50	3	.209
Attending a club	0 0%	4 19%	17 39%	19 22%	15.7	3	.001*
Other	3 10%	2 10%	11 25%	19 22%	4.19	3	.241

*significant at or beyond .05 level

It can be seen that there is only one statistically significant finding here with one trend toward significance.

Spare Time Job

The results here are presented in the table below.

Table (99) Part time job by group - BOYS

Variable	SP	AA	DA	CON	χ^2	df	p
N=	30	21	44	88			
Have a part time job	5 17%	6 29%	20 46%	37 43%	8.2	3	.04*

*significant at or beyond .05 level

These figures are in line with prediction for the two most anxious groups but not for the DA group.

Appendix (20) presents an analysis of the data on pupils out of school activities from the parental point of view. Unfortunately parental data are available only for the three groups - the SP's, DA's and CON's.

The only differences to reach statistical significance were those relating to 'playing with friends' reported by 27% of SP's, 39% of DA's and 7% of CONS (Chi Sq. 7.5, df 2, p .023) and 'wandering around' which was reported by 23% of SP's, 7% of CON's but by no DA pupil (Chi Sq. 7.1, df 2, p .028). Additionally one should note that the difference on the 'playing with friends' variable was not in the predicted direction.

The question of where the members of SP, DA and CON groups are when not in school is related as certain activities such as going to a club would be restricted if the boys were habitually in or near the home. Parental questionnaire item 35 (Variable 190) explores this area.

Appendix (21) reports the results of this analysis. This reveals that there is no overall difference in the proportion of pupils who remain close to their homes for leisure pursuits. Here only 7% of SP's stay within view of their home compared with 6% DA's and 3% CON's. Data are not available on the AA group. Similarly close proportions are reported for the more than five minutes away category with this being reported for an identical 47% of SP's and CON's and 50% for DA's.

SUMMARY - BOYS

Self declared preferences for various spare time pursuits reveals statistically significant differences among the four groups on 'attending a club' where the findings were very much in the predicted direction with no SP's belonging to a club. There was a trend toward statistical significance for the 'hobby or sport' category again with many fewer SP's involved.

There was a clear linear trend involving significantly fewer SP's having a part time job, somewhat more AA's having such jobs while DA's and CON's had a similar and much higher incidence of part time employment.

Data from parental questionnaires revealed significant differences among the SP, DA and CON groups (ie those upon whom data are available) in terms of parental perceptions of leisure activities. These occurred on the 'wandering around' variable where significantly more SP's are so regarded, and on the 'Playing with friends' variable where, surprisingly, a much smaller proportion of CON's were so regarded. There were trends towards significance for 'Attending a club' and 'Other' in the predicted direction of fewer anxious pupils involved.

The possibility that proximity to home for general leisure activities might be a significant variable was investigated using parental questionnaire data. No significant differences were found on this variable.

RESULTS - GIRLS

Spare Time activity was defined in the same manner with girls as with boys. Table (100) reports the results of the principle analysis in terms of the pupil self-report data.

Table (100) Spare time activity by group membership GIRLS

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	49	108			
Watching television	12 67%	8 47%	26 53%	54 50%	1.30	3	.727
Playing with friends	3 17%	6 35%	17 35%	47 44%	5.66	3	.129
At a hobby or sport	2 11%	6 35%	14 27%	33 31%	6.03	3	.109
Wandering around	4 22%	1 6%	5 10%	8 7%	3.84	3	.278
Listening to records/radio	11 61%	8 47%	43 88%	60 56%	17.5	3	.005*
Attending a club	0 0%	4 25%	13 27%	34 32%	8.31	3	.039*
Other	2 11%	5 30%	12 25%	42 39%	7.70	3	.05*

*significant at or beyond the .05 level

It is clear from this table that there are only three spare time activities on which the groups differ to a statistically significant degree.

The direction of the findings is as predicted only in the case of attending a club. Note however that, among the non significant findings there are directional trends eg a higher proportion of SP's spend their time watching television and a smaller proportion playing with friends.

The issue of whether the groups differ in the proportions in which they report themselves to have a part time job was also investigated and the findings reported in the table below.

Table (101) Part time job by group membership - GIRLS

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	49	108			
Have a part time job	0 0%	2 12%	11 23%	25 23%	6.38	3	.094

Unlike the situation with boys the girls results indicate only a trend towards significance. The results are none the less in the predicted direction.

Appendix (22) presents an analysis of the data on pupils' out of school activities from the parental point of view. Parental data are available in sufficient quantity to permit analysis for only the SP and CON groups.

Analysis of parental report data reveals only one significant difference between SP's and CON's for girls. This is found on the 'hobby or sport' variable. Here the parents of 20% of CON's report this as a significant spare time activity whereas no parent of a SP mentions it.

Parental report is also the data source for childs proximity to home when not in school. Appendix (23) reports the findings on this variable. Here 21% of SP girls are within view of the home compared with only 8% of CON's. 47% of SP's are within five minutes of the home compared with only 16% of CON's while only 21% of SP's are more than 5 minutes away in contrast to 72% of CON's being more than five minutes away (Chi Sq. 10.6, df 3, p .013). The data for the girls' groups is therefore more in line with prediction than among the boys.

SUMMARY - GIRLS

Self declared preferences for various spare time pursuits reveal statistically significant differences among the four groups on three variables. There is a trend toward significance in terms of having a part time job.

Parental data are only available for the SP and CON groups. This indicates only one difference on spare time activity but reveals a much higher proportion of CON's more than five minutes from home in terms of where they are for spare time activities or otherwise not in school.

DISCUSSION BOYS AND GIRLS

Investigation of the previous sub-hypothesis had indicated that difficulties with friendship formation were not reflected in a strong way in the present study either in terms of peer Rejection or Popularity/Acceptance as measured by sociometric means. Is the association of anxieties about going to school with friendship difficulties likely to restrict the choice of spare time activities? Certainly it has been argued that for some reaction to be construed as an emotional handicap it must represent some restriction on the childs freedom of movement or choice (Bower 1969).

There appears to be good face validity in the idea that the higher the anxiety regarding being in the school setting the more likely the pupil is to prefer more solitary activities. Certainly there is some evidence that the school phobic child is socially rather immature and fearful (Van Houton 1948, Hitchcock 1956, Weiss and Cain 1964).

The present child data indicate that the four groups do not differ in the proportions who like watching television for either boys or girls. However significant differences were found on the listening to records or radio variable for girls though not for boys. It is to be noted however that the direction of these results is not that predicted with the group revealing the highest proportion being the DA group.

It should be noted that both watching television or listening to records/radio could be either a social or an isolated activity. Much the same could be argued, though possibly with less force, in terms of the variable 'hobby or sport', where there is a trend in the predicted direction for boys but not girls. However with both boys and girls the group revealing the lowest proportion of pupils nominating 'hobby or sport' is the SP group. In retrospect it would have been prudent to have listed 'hobby' and 'sport' as separate items.

It had also been predicted that 'aimlessly wandering around' would be commoner in the more anxious groups. However this did not prove to be so to a significant extent for either boys or girls - though the proportion of SP girls reporting this is higher.

Even more surprising is the 'playing with friends' variable. Here all four groups of boys nominated this to a remarkably similar extent with between 45% and 50% of each group making this specification. The picture with girls is rather different and closer to prediction. Here 17% SP's report playing with friends as a spare time activity whereas 35% of both AA'a and DA's report this and a slightly higher 44% of CON's. Examination of the previous hypothesis indicates that the groups do not differ in a powerful overall sense in terms of Popularity/Acceptance or Rejection by their peers. It must be noted that the data here are obtained without reference to the source of friends ie from own school or elsewhere.

We know from the evaluation of hypothesis 3b that this can be important. Additionally clinical experience indicates that, among the school phobic population, there are many pupils who need to (can cope only if?) they can control the frequency, intensity and duration of their social contacts.

This interpretation is congruent with the present data in the form of the highly significant findings in relation to the variable 'attending a club'. This is the only one of the listed activities which would seem to oblige social contact. No SP boy or girl claims to attend a club. Among AA's 19% of boys and 25% of girls specify this whereas among DA's 39% of boys and 27% of girls make this claim. With the CON groups 32% of girls and a lower 22% of boys nominate this.

One must, of course, be mindful of other interpretaive possibilities. It may be that the parents of non-attending pupils do not permit them to attend or that some of the clubs are run by or in the school. If the former reason is valid however it would be hard to see why some of these pupils are permitted to have a part time employment. The proportion of CON's who attend a club relative to DA's is interesting being lower for boys and not very different for girls. One would have expected that a higher proportion of those with no anxieties regarding school would have been involved. It is possible that the DA group being somewhat older may have more social freedoms or even more available outlets for their age group.

The figures on part time jobs seem worthy of comment. It is surprising that as many as 17% of SP boys can maintain a job though it should be noted that no SP girl claims to have a part time job. Unfortunately data are not available as to what kind of job is involved. Some jobs are likely to involve much more interpersonal contact and confidence than others. In interpreting this information however one must have regard for the fact that the employment opportunities and legal status of the SP and AA groups will be influenced by their being in the youngest age groups - though this would equally affect boys and girls.

Parental data regarding spare time activities produce a surprising finding in terms of the 'Playing with friends' variable. Here the proportion of the CON group for whom this is nominated by their parents is very low for both boys and girls. It may well be that parents view being involved with friends in various activities in terms of that activity rather than as 'playing' which may have more trivial connotations for this age range of pupils. One should note, however, that the parents of the CON group very substantially and systematically produce figures below the level of child self-perceptions on practically every dimension for both girls and boys.

It must be said that the index of spare time activity used in this study is at best crude. Factors which require more control than has been possible here include, 'availability', 'parental attitude' and 'cost'.

The question of where members of the various groups are when not in school is specially relevant to the aetiological model of anxiety regarding school which locates the source of the problem in difficulties in separating from mother and father (Waldfogel et al 1956, Eisenberg 1958, Gittelman-Klein and Klein 1980). It would seem reasonable to suggest that those most anxious about separating from parents would remain in proximity - even sight - of the house. However the boys groups do not differ on this variable with almost half of each group being more than five minutes away from home when not in school. The situation is very different for the two groups of girls on whom these data are available. Here 72% of CON's are more than five minutes away in comparison with 21% SP's.

It may be helpful to maintain a perspective on this by recalling that between 80% and 100% of both boys and girls report that they are usually happy at home. Furthermore fewer than 40% of each group report worries regarding their parents when they are in school with the important exception of AA girls among whom 70% report this anxiety. Among the SP groups however only 23% of boys and 26% of girls nominate this as important. It would seem on the basis of this data that the separation anxiety explanation is not very powerful for the age group involved in this study with the possible exception of AA girls. Even here the anxiety may have a component of fear of meeting other girls.

Overall it is possible to conclude that where data are available and focus on more social dimensions such as attending a club that there does appear to be some limitation on the childs freedom of action largely in the direction predicted by the hypothesis. It should be remembered here that in the discussion of hypothesis 2 relating to other fears that fear of going out approached statistical significance for girls but not for boys.

It now remains to move to the evaluation of the final sub-hypothesis in this section. Here the investigation focuses on whether the difficulties outlined in the previous sections are actually reflected in pupil attendance both in terms of missing time by pretending to be ill and of self confessed truancy.

HYPOTHESIS 3g

This hypothesis states that the proportions staying off school by pretending to be sick will vary in the direction of a higher proportion of more anxious pupils reporting this. It is further hypothesized that a smaller proportion of the anxious groups will report truancy in the sense of absence from school without their parents knowledge.

Investigation of hypotheses 3a to 3f has adduced evidence for a sub group of school phobics (or possibly a sub component in school phobia) relating to the general area of peer difficulties.

This final section examines the available data from the present study to evaluate how far this emerges in the form of achieving absence by any of the available means.

Firstly it may be helpful to have a look at general school attendance. Such data were collected for a randomly chosen 10 week period for Boys in the AA, DA and CON groups. These data were in the form of a separate am/pm breakdown for each day of the week. A discriminant function analysis was performed in order to see if these data could reliably separate the groups. The results of this analysis are presented in table (102). These data are available only for the boys groups.

Table (102) Classification Analysis AA, DA, CON groups by attendance data - BOYS

ACTUAL GROUP	N	PREDICTED GROUP MEMBERSHIP		
		AA	DA	CON
AA	20	8 40%	8 40%	4 20%
DA	43	6 14%	30 70%	7 16%
CON	86	27 31%	33 38%	26 30%
PERCENTAGE CORRECTLY CLASSIFIED 43%				

It is clear from this that attendance data per se do not reliably discriminate among the groups. Subsequent questions relate not so much to the level or pattern of absence but to reasons for absence.

V55 (pupil questionnaire item 34) asked 'Have you ever stayed away from school by pretending to be sick'. The results of this analysis are presented in table (103).

RESULTS - BOYS

Table (103) Pretending to be sick by group membership

Variable	SP	AA	DA	CON	χ^2	df	p
N=	30	21	44	88			
Never	11	5	19	35			
	37%	24%	43%	40%	2.4	3	.488
At least	19	16	25	53			
once	63%	76%	57%	60%			

There are no statistically significant differences in the proportions admitting to having time off school by pretending to be ill.

Variable 56 (pupil questionnaire item 35) asked about absence without parental knowledge. Table (104) presents the results of the analysis of this data.

Table (104) Truancy by group membership - BOYS

Variable	SP	AA	DA	CON		df	p
N=	30	21	44	88			
Never	21	17	42	37			
truanted	70%	81%	96%	42%	40.4	3	.0000*
At least	9	4	2	51			
once	30%	19%	4%	58%			

* significant at or beyond .05 level

It can be seen from this that there are highly significant differences in the proportions of boys who admit truancy as a function of group membership.

While data in sufficient quantity to permit analysis are available only for the SP and CON groups it is interesting to look at the question of whether pupils are alone or with others when truanting. Though the numbers are very small in terms of the SP group they are revealing. Of the 9 SP's who admit truancy 8 (89%) indicate that they were alone when they truanted. Of the 51 CON's who admitted truancy 10 (19%) indicated that they were alone at the time (χ^2=17.4, df=1, p= .0000).

It can therefore be seen that not only do the proportions of pupils admitting truancy vary as a function of group membership but that the issue of whether the truancy is 'social' or 'isolated' may be important.

The general issue of truancy was also investigated in terms of parental data. This is somewhat problematical since by definition truancy is absence without the parents knowledge or consent. One has to assume that the parental data is an underestimate of the true figures.

Examination of the parental data produced a trend toward statistical significance. Appendix (24) presents the results of this analysis. Parental data are available on SP, DA and CON groups.

The parents of 33% of SP boys regard them as having truanted 'at least once' compared with 30% CON's and only 6% DA's (Chi Sq. 5.03, df 2, p .08).

Another aspect of the issue of truancy is data from teachers. Two items on the Rutter Scale are relevant here. V76 (Rutter Scale item 2) relates to teacher perceived truancy and V88 (Rutter Scale item 14) relates to absence from school for what the teacher believes to be trivial reasons. Appendices (25 & 26) report the results of an analysis of these data.

Only the teachers of the CON group identify truancy in the 'certainly applies' category but in a marginal 5% of cases. The 'applies somewhat' category is used in regard to some 12% of CON's and to 3% of DA's (Chi Sq. 8.6, df 4, p .07). Though the absolute figures are low the direction of the effect is very much that which had been predicted.

It is possible that teachers feel some pupils are not actually truanting but are absent from school for fairly trivial reasons. However no significant differences were found in the proportions of the three groups on this variable (Appendix 26). The 'Doesn't apply category was assigned in 100% of AA cases; in 95% of DA cases and in 93% of CON cases (Chi Square 1.6, df 4, p .795).

SUMMARY -BOYS

Neither the level nor the pattern of school attendance was found to discriminate among the AA, DA and CON groups upon whom data are available. The successful classification rate was only 43% - not very much above chance.

The proportions of SP's, AA's, DA's and CON's admitting to having time off school by pretending to be sick did not differ significantly. However in the case of truancy significant differences were found with 58% of CON's admitting truancy compared with 30% of SP's, 19% of AA's and only 4% of DA's. The SP group was significantly more prone to being solitary in their truanting when compared with CON's.

Parental data indicates a trend toward significance. Additionally parental data confirms the existence of truancy among the SP group. Teacher data did not reveal any significant differences among the AA, DA and CON groups in terms either of teacher perceived truancy or of absence for reasons they considered trivial though there was a trend for the teachers of CON's to regard them as truanting somewhat more often.

RESULTS - GIRLS

No data on general attendance at school are available for the girls groups. In this section results will be presented for the 'Pretending to be sick', and 'Truancy' variables as well as parental and teacher views for girls. Table (105) presents the figures for self- report of missing time from school by pretending to be sick.

Table (105) 'Pretending to be sick' by group membership'

GIRLS

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	49	108			
Never	11	9	19	64			
	58%	53%	40%	59%	5.8	3	.118
At least	8	8	30	44			
once	42%	47%	60%	41%			

There are no statistically significant differences in relation to this variable.

Table (106) examines the girls' data by group membership in terms of self reported truancy. As with the boys this is indexed by reference to Variable 56 (pupil questionnaire 35) which asks whether and how often the pupil has stayed away from school without the parents knowing.

Table (106) Truancy by group membership - Girls

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	49	108			
Never truanted	18 95%	15 88%	36 74%	100 93%	12.3	3	.006*
At least once	1 5%	2 12%	13 26%	8 7%			

*significant at or beyond the .05 level

It can be seen from this table that there are significant differences in terms of the truancy variable as a function of group membership.

Data exists in sufficient quantity to permit analysis only on the DA/CON distinction in terms of whether any reported truancy is 'social' ie in the company of others or 'isolated' ie by oneself. Though the numbers are very small and must be treated very cautiously, it is none the less of some interest to note that for girls the proportions in these two groups who report isolated truancy does not differ significantly with anxiety about school. Of the 13 DA's who acknowledge truancy N=2 (13%) report that this was by themselves. Similarly with the 11 CON's who admit truancy N=3 (27%) report that this was by themselves (Chi Sq. .5105, df=1, p=.474). These findings are in contrast with those obtained with the boys data.

The issue of truancy could also be investigated in terms of parental data. Appendix (27) reports the results of an analysis of the parental data for the SP and CON groups - the only groups with sufficient data among the girls to permit analysis. Here 95% of the parents of SP girls and 96% of the CON parents indicate that they feel their children have 'never truanted' (Chi Sq. .039, df 1, p .499).

Another aspect of truancy and one on which data are available in greater quantity relates to teacher perceptions as indexed by the Rutter Scales. Appendix (28) reports these results in detail. The results are again very far short of significance with the teachers of 94% of AA's indicating the 'doesn't apply' category together with 93% of the teachers of DA's and 97% of teachers of CON's (Chi Sq. 3.36, df 4, p .499).

The situation in terms of teacher perception of being 'absent for trivial reasons' is very different. Appendix (29) reports these results in full. Here the teachers of 18% of AA's, and 23% of DA's report that this applies somewhat whereas the teachers of only 4% of the CON's so felt (Chi Sq 14.5, df 4. p .005).

SUMMARY OF RESULTS - GIRLS

Hypothesis 3g related to various means of avoiding school either by staying off by pretending to be sick or by truancy.

No statistically significant differences were found among the 4 groups in the proportions admitting to staying off school by pretending to be sick. However, as was the case with boys, there were statistically significant differences on self-reported truancy though not in the predicted direction.

Parental data are available only for the SP and CON groups. There is disagreement with the pupil self-report on truancy in that no significant differences are found by parental report. Parental data however do confirm the very low rate of Truancy among SP girls.

Teacher perceptions as tapped by the Rutter Scales reveal no statistically significant difference on truancy but reveal that significantly more AA's and DA's are regarded as being absent for trivial reasons.

DISCUSSION BOYS AND GIRLS

Despite the fact that not being able to be in school is an important part of most definitions of school phobia, the research strategy of examining the attendance records of the pupils for patterns does not appear to have been used or at any rate, if used, not reported. This may be because the value of figures from attendance registers has been challenged by various workers (Williams 1974, Carroll 1977) as they fail to distinguish between possible reasons for non-attendance.

In the present study data on the level of school attendance and on the pattern of attendance were abstracted from the school registers for a 10 week period. These data are available for AA, DA and CON boys but not for SP's. The use of the classificatory procedures on a Discriminant Function Analysis failed to demonstrate that this approach can satisfactorily reclassify cases - the obtained results being not much better than chance.

Two points should be made in relation to this finding. Firstly these data are not available on girls and the situation might be very different given other findings and secondly the attendance register may be too crude in itself but before being dismissed should be tested in a situation where the information is enriched by diary type monitoring of feelings.

The question of being absent from school by pretending to be sick was also investigated. Part of the definitions of the various groups involved in this study included the presence or absence of various psychosomatic symptoms. It seems plausible to speculate that those pupils who experience psychosomatic symptoms would use physical illness as a means of avoiding going to school. Wallace (1955) repoted that half of the (non phobic) children in his sample receiving home tuition were actually medically fit for immediate return to school. Waller and Eisenberg (1980) talk in terms of a paediatric masquerade syndrome in which children anxious about school present with physical symptoms. There is also evidence to suggest that parental concern may diminish their ability to detect feigned illness (I.S.T.D. 1974).

However, despite its plausibility, the strategy of staying away from school by pretending to be sick fails to discriminate among the groups for either boys or girls. There are no statistically significant differences in the proportions reporting the use of this ploy 'at least once'. It is, however, of interest to note that the AA boys group use it numerically more often with 76% of AA boys reporting this compared with only 47% of AA girls. It is possible that this strategy is more frequently employed by younger pupils and by the average age of the groups involved in this study may have lost its utility.

Pupil data on self-reported truancy is interesting. Among CON's 58% of boys admit truancy whereas only 26% of girls do so. Pooling the data for boys and separately for girls across all four groups reveals that overall 36% of boys report truancy whereas the overall figure for girls is 12%. This is a statistically highly significant difference (Chi Square 28.8, df=1, p=.000). Data from the N.C.D.S. (1980) reveals that 52% of 16 year olds agree that they had stayed away from school when they should have been there, while Mawby (1977) reported that 46% of his sample of 11 to 15 years olds admitted truancy. The present figures for boys in the CON group are therefore fairly well in line with national figures.

What is surprising here, however, is the proportion of SP boys admitting truancy. Traditionally the school phobia literature has made a sharp distinction between school phobia and truancy (Broadwin 1932, Warren 1948, Hersov 1960). Indeed Berg et al (1969) implicitly include non-truancy as part of their definition of school phobia. It appears that the combination of the fact that, in its frank clinical form, the parents of school phobics know that they are not at school and the definition of truancy as absence without the parents knowledge has resulted in a fairly general assumption that school phobics do not truant. This may be closer to the truth in the case of girl phobics. Only one girl in the SP group admitted ever truanting.

The obtained proportions for AA's and DA's are also interesting. Only 19% of AA boys and 12% of AA girls admit to truanting, while only 4% of DA boys and a rather higher 26% of DA girls so report. These pupils, who in the definitions used in this study, are anxious about school but continue to attend, seem surprisingly seldom to use truancy as a relief from the anxiety.

How can such a difference in recourse to this strategy be explained? Is it that they have other strategies which permit them to remain in school? Is it that truancy has, for some reason, not become part of their repertoire? Does it relate to parental effectiveness or to an even greater fear of being caught? Unfortunately present data do not permit a resolution of these issues. It is possible that if something precipitated a 'successful' period of anxiety-related absence in an AA child that they would make the transition to a non-attending phobic reaction.

It is also interesting to recall here that of those boys who admit truancy 89% of SP's were alone when they truanted whereas only 19% of CON's who truanted were alone. The figures for girls were non significant. One should be careful here not to overstate the case as the numbers involved are in fact very small. None the less the unsocialized nature of SP boys 'truancy' is in keeping with the notion of peer isolation or difficulties.

The parental data largely confirm the proportion of boys and girls who have truanted. Teacher data (which unfortunately are not available on SP's) does not reveal any significant differences in terms of teacher perceived truancy either for boys or girls. There is however a trend in the direction of more teachers regarding CON boys as having truanted. While there are no differences among the teachers in regard to feeling boys are absent for trivial reasons there are significant findings here for girls. It should be recalled here that it was among girls that the sociometrically defined Rejection Scale achieved a degree of significance.

It may be as well at this juncture to highlight the fact that the issue of the truancy/school phobia distinction is wider than clinical and academic interest. Children can be received into the Care of the Local Authority for non-attendance at school. Tennant (1969) found that 8% of those in care for non-attendance had previously unrecognized anxieties in regard to attending school. It would seem that the Berg et al (1969) criteria are too harsh in excluding the possibility of truancy. This also calls into some question the frequent use of a 'truant' control group in school phobia research. Finally one should note here that Van Doren (1964) found that some of the truants she studied had previously been school phobic but their condition had been poorly recognized and inappropriately dealt with by force so that some had learned not to show anxiety and had opted out of school in a truant pattern.

HYPOTHESIS 4

Hypothesis 4 states that the 4 groups will differ in the extent to which they display sleep related problems with the more anxious groups being more prone to these.

This hypothesis is investigated via pupil and parental questionnaire data. The primary data are from the pupil questionnaire which is available for all pupils. Parental data cover the same terrain but are not available for all pupils. It adds a question regarding bedwetting.

V30 (Pupil questionnaire item 23) asks for a response to the statement 'I have had some problems getting off to sleep during the past three months or so' by underlining one of 'not at all', 'occasionally', or 'frequently'.

V31 (Pupil questionnaire item 24) has the pupil respond to the question 'I wake at night?' by underlining one of - 'never', 'seldom', 'once a week', 'twice a week', 'nearly every night', 'every night'.

V32 (Pupil questionnaire item 25) asks the question 'I have bad dreams which wake me in the night?'. Here the response options are, 'never', 'about once a month', 'about once a week', 'more than once a week', 'nearly every night' and 'every night'.

V29 (Pupil questionnaire item 22) requires a yes/no response to the question 'Have you a bedroom to yourself?'

RESULTS - BOYS

Table (107) presents the results of a Chi square Analysis of the results for the four groups in terms of the 'Problems geting off to sleep' variable.

Table (107) 'Problems getting off to sleep' by group membership - BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
None	4 13%	7 33%	4 13%	17 41%	4 13%	48 55%	7 33%	48 55%	7 33%	17 41%	17 41%	48 55%
Some	26 86%	14 67%	26 86%	26 59%	26 86%	40 45%	14 67%	40 45%	14 67%	26 59%	26 59%	40 45%
χ^2	2.9		5.9		15.4		3.0		.17		2.6	
df	1		1		1		1		1		1	
p	.087		.014*		.0000*		.08		.678		.106	

*significant at or beyond the .05 level

Examination of this table indicates a partial confirmation of the hypothesis. Significant differences were found between the SP's and DA's and SP's and CON's. There was a trend toward significance between SP's and AA's.

Though there can be dangers in combining categories into new or alternative variables if interpreted cautiously such an approach can generate fresh information and insight. This procedure is followed here.

If the 'none' and 'occasionally' categories are combined and compared with 'frequently' a similar overall pattern emerges but somewhat more in line with the hypothesis. In the case of SP's and AA's 30% and 24% respectively respond with 'frequently', (Chi Sq = .237, df=1, p=.652). SP's significantly differ from DA's only 7% of whom respond 'frequently' (Chi sq = 7.05, df=1, p=.007) and from CON's where only 10% respond with the category 'frequently' (Chi sq = 6.76, df=1, p=.009).

It is interesting to note that AA's differ significantly from DA's here with 24% of AA's responding 'Frequently' compared with only 7% of DA's (Chi sq = 3.8, df=1, p=.05) whereas there is still only a trend in the case of AA'S and CON's with 10% of CON's responding 'frequently'. (Chi sq = 2.79, df=1, p= .09). DA's do not differ significantly from CON's (Chi sq=.042, df=1, p=.836).

The same question regarding problems getting off to sleep was posed by V196 (Parental questionnaire item 41). Data here exists for the SP, CON and DA groups. The results of the Chi Square analysis of parental data are presented in table (108)

Table (108) Difficulty getting off to sleep. Parental data - BOYS

	SP	CON	SP	DA	DA	CON
N=	25	27	25	18	18	27
Yes	23 92%	6 22%	23 92%	7 39%	7 39%	6 22%
No	2 8%	21 78%	2 8%	11 61%	11 61%	21 78%
χ^2	25.6		13.9		1.46	
df	1		1		1	
p	.0000*		.0001*		.226	

*=significant at or beyond .05 level

As with pupil questionnaire data if one combines 'never' with 'occasionally' and examines the results in terms of those regarded as 'frequently' having difficulty getting off to sleep a similar pattern emerges. Parents of 12 SP's (48%) report the difficulties with sleeping as 'frequent' compared with the parents of only 1 CON child (4%) (Chi sq=13.58, df=1, p= .0002). No parent of a DA child reports sleeping problems as 'frequent' thus creating a significant difference between SP's and CON's (Chi.Sq 11.98, df=1 p=.0005). Clearly, also, the differences in proportions of DA's and CON's reported as having 'frequent' sleep problems is very small (Chi sq=.681, df=1, p=.408).

Difficulty getting off to sleep is only one pattern of sleep problem which might be relevant. V31 (Pupil questionnaire item 24) relates to the problem of waking at night. Table (109) examines responses to this item in terms of whether the pupils 'ever' waken at night.

Table (109) Nighttime Waking - Pupil Data - BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
Yes	26	18	26	35	26	59	18	59	18	35	35	59
	86%	86%	86%	79%	86%	67%	86%	67%	86%	79%	79%	67%
No	4	3	4	9	4	29	3	29	3	9	9	29
	14%	14%	14%	21%	14%	33%	14%	33%	14%	21%	21%	33%
χ^2	.009		.624		4.27		2.84		.458		2.23	
df	1		1		1		1		1		1	
p	.922		.429		.038*		.09		.498		.134	

*significant at or beyond the .05 level

Here the only significant difference is between the SP and CON boys. This difference is very much in the predicted direction with a higher proportion of SP's reporting this as a problem.

It may be helpful to examine the same data not in terms of the presence or absence of *nighttime waking* but of frequency. Table (110) presents the same data analysed in terms of occurance of nightime waking 2+ times per week.

Table (110) Night-time waking two or more times per week
Pupil data - BOYS

	SP AA	SP DA	SP CON	AA CON	AA DA	DA CON
N=	30 21	30 44	30 88	21 88	21 44	44 88
One Min us	23 13 77% 61%	23 28 77% 64%	23 79 77% 90%	13 79 61% 90%	13 28 61% 64%	28 79 64% 90%
Two Plus	7 8 23% 39%	7 16 23% 36%	7 9 23% 10%	8 9 39% 10%	8 16 39% 36%	16 9 36% 10%
χ^2	1.29	1.4	4.9	10.0	.018	13.05
df	1	1	1	1	1	1
p	.254	.234	.226	.001*	.892	.0003*

*significant at or beyond the .05 level

Here the same trend continues with CON's reporting by far the lowest frequency of night time waking. However against prediction the SP group had the lowest frequency of those groups which report anxiety regarding school attendance.

Yet another way of looking at the issue of sleep problems is to investigate the issue of dreaming. V32 (Pupil questionnaire item 25 asks whether the child has bad dreams which wake him in the night. Table (111) reports the results of this item. It is here hypothesized that the more anxious the child regarding school attendance the more likely he would be to report bad dreams.

Table (111) Bad dreams which wake the child. (Self report data - BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	21	30	88	21	88	21	44	44	88
Yes	7 21%	11 52%	7 21%	7 16%	7 21%	24 27%	11 52%	24 27%	11 52%	7 16%	7 16%	24 27%
No	23 79%	10 48%	23 79%	37 84%	23 79%	64 73%	10 48%	64 73%	10 48%	37 84%	37 84%	64 73%
χ^2	4.56		.64		.179		5.05		9.44		2.1	
df	1		1		1		1		1		1	
p	.032*		.423		.672		.024*		.002*		.146	

*significant at or beyond the .05 level

This table indicates that there are statistically significant differences between AA's and each of SP's, DA's and CON's. In each case this is in the direction of the AA's experiencing more bad dreams which wake them in the night.

Data from the parental questionnaire exists in sufficient quantity to analyse for SP's, DA's and CON's. Table (112) below reports the results of this analysis.

Table (112) Bad dreams which wake the child. (Parental Report) - BOYS

	SP	CON	SP	DA	DA	CON
N=	30	26	25	18	18	26
Yes	13 43%	1 3%	13 43%	3 17%	3 17%	1 3%
No	17 57%	25 97%	17 57%	15 83%	15 83%	25 97%
χ^2	12.13		3.92		2.11	
df	1		1		1	
p	.0004*		.047*		.145	

*significant at or beyond the .05 level

Analysis by parental data reveals that a higher proportion of the parents of SP's report that their children have bad dreams which wake them in the night than is claimed by the pupils themselves. Conversely the parents of a much smaller proportion of CON's report that their children have bad dreams than emerges from direct pupil data.

Problems relating to sleep may well be influenced by whether the child has a bedroom to himself. V29 (Pupil questionnaire item 22) investigated this. Table (113) presents the results.

Table (113) Bedroom to self - BOYS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	30	21	30	44	30	88	21	88	21	44	44	88
Yes	17 57%	19 90%	17 57%	36 84%	17 57%	63 72%	19 90%	63 72%	19 90%	36 84%	36 84%	63 72%
No	13 43%	2 10%	13 43%	8 16%	13 43%	24 28%	2 10%	24 28%	2 10%	8 16%	8 16%	24 28%
χ^2	6.80		6.50		2.56		3.01		.818		1.6	
df	1		1		1		1		1		1	
p	.009*		.01*		.1097		.082		.365		.200	

*significant at or beyond the .05 level

It can be seen that significantly fewer SP's have a room to themselves than AA's or DA's. Interestingly and rather against prediction SP's do not differ from CON's in this respect.

The only other data relating to night/bedtime concerns whether or not the child bedwets. This question was included on the parental questionnaire. Data exists here for the SP, DA and CON groups. Table (114) presents these results.

Table (114) Bedwetting (Data from parental questionnaire) - BOYS

	SP	CON	SP	DA	DA	CON
N	30	25	30	18	18	25
Y E s	7 23%	0 0%	7 23%	1 6%	1 6%	0 0%
N o	23 77%	25 100%	23 77%	17 94%	17 94%	25 100%
χ^2	6.68		2.56		1.42	
df	1		1		1	
p	.009*		.109		.233	

*significant at or beyond the .05 level

Of the three groups upon whom data exists on this item only the SP group are represented to a significant degree. The direction of prediction is confirmed.

SUMMARY OF RESULTS - BOYS

Hypothesis 4 raised the possibility that pupils more anxious in relation to school attendance might have more sleep related problems. The obtained results from the pupil questionnaire data are in the predicted direction with 86% of SP's, 67% of AA's, 59% of DA's and 45% of CON's reporting some difficulty in getting off to sleep.

When options are restricted to 'frequent' difficulty the figures are SP's 30%, AA's 24%, DA's 7%, and CON's 10%. Data from the parental questionnaire suggest that the parents of 92% of SP's, 39% of DA's, and 22% of CON's report these difficulties. No data are available from the parents of AA's.

Night-time waking is reported as a problem by 86% of SP's and AA's, and by 79% of DA's and 67% of CON's. Analysed by frequency of 2+ experiences of night-time waking per week the figures are in line with prediction for school attenders with 39% AA's, and 36% DA's being in this category but only 10% of CON's (23% of SP's report this frequency of night-time waking).

Similar proportions report bad dreams with this being the case in 21% of SP's, 16% of DA's, and 27% of CON's. Note however a very high 52% of AA's report bad dreams. Parental data increases the SP percentage to 43% but drops the CON percentage to 3% and the DA percentage to 17%.

While 90% of AA's, 84% of DA's and 72% of CON's have bedrooms to themselves only 57% of SP's have this advantage. It is also only in the SP group that bedwetting seems to be represented as a problem with the parents of 23% of SP's reporting this. Only 1 DA boy and no CON boy is reported to have wet the bed. No data are available from the parents of the AA boys.

RESULTS -GIRLS

Table (115) presents the results of a Chi Square Analyis of the results of the four groups of girls in terms of the 'Problems getting off to sleep' variable.

Tabel (115) 'Problems getting off to sleep' by group membership - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
None	2 11%	5 29%	2 11%	18 37%	2 11%	54 50%	5 29%	54 50%	5 29%	18 37%	18 37%	54 50%
Some	17 89%	12 71%	17 89%	31 63%	17 89%	54 50%	12 71%	54 50%	12 71%	31 63%	31 63%	54 50%
χ^2	2.04		4.5		10.2		2.49		2.49		2.38	
df	1		1		1		1		1		1	
p	.125		.033*		.004*		.113		.113		.112	

*significant at or beyond the .05 level

Examination of this table indicates that the hypothesis that more anxious pupils will report more difficulties in getting off to sleep is confirmed. The proportions are highest among SP girls, next highest among AA's, then DA's and finally the lowest levels are among the CON group.

As in the analysis of the data from the boys' groups it is here proposed to analyse the same data grouped so that the 'none' and 'occasional' categories are combined and compared with 'frequently'. When this is done it is found that 47% of the SP group reports 'frequent' difficulties getting off to sleep whereas only 12% of AA's, 10% of DA's and 8% of CON's so do.

The SP group significantly differs from AA's (Chi Square 5.35, df=1, p=.02), and from DA's (Chi Square 11.5, df=1, p=.0006) and CON's (Chi Square 20.4, df=1, p=.0000). Since the figures for AA's, DA's and CON's are remarkably alike it seems that the significance of these findings resides in the large proportion of SP's reporting sleeping difficulties. This proved to be so whether viewed in terms of presence or absence or of higher frequencies.

Parental data on sleep difficulties are available in sufficient quantity for valid analysis only in respect of the SP and CON groups. Table (116) reports this analysis.

Table (116) Problems Sleeping (Parental Report) - GIRLS

	None	Some	χ^2	df	p
SP	6	13			
N=19	32%	68%	3.49	1	.061
CON	15	10			
N=25	60%	40%			

There is a clear trend towards significance with more of the parents of SP's regarding some degree of sleep difficulties as characteristic of their children. However if one here combines 'never' and 'occasionally' and compares it with 'frequently' as a response a much more interesting picture emerges. The parents of 31% of SP's regard their children as having frequent difficulties compared with the parents of only 1 CON child (Chi Square 6.13, df=1, p=.013).

Difficulty in getting off to sleep is only one of the possible pattern/manifestations of sleep problems. Unwelcome night-time waking is another. Table (117) presents the results of this analysis firstly in terms of pupil data.

Table (117) Night-time Waking - Pupil Data - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
Y												
e	14	14	14	42	14	92	14	92	14	42	42	92
s	74%	82%	74%	86%	74%	85%	82%	85%	82%	86%	86%	85%
N	5	3	5	7	5	16	3	16	3	7	7	16
o	26%	18%	26%	14%	26%	15%	18%	15%	18%	14%	14%	15%
χ^2	.390		1.36		1.54		.091		.110		.007	
df	1		1		1		1		1		1	
p	.535		.242		.213		.762		.739		.930	

It is interesting that when reported in terms of the presence or absence of night-time waking there are no significant differences among the groups. It may be helpful to examine the same data in terms of frequency of night-time waking. Table (118) presents these results.

Table (118) Nighttime Waking two or more times per week - pupil data - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
One Min us	15 79%	10 54%	15 79%	36 74%	15 79%	93 86%	10 54%	93 86%	10 54%	36 74%	36 74%	93 86%
Two Plus	4 21%	7 41%	4 21%	13 26%	4 21%	15 14%	7 41%	14 14%	7 41%	13 26%	13 26%	15 14%
χ^2	1.71		.219		.651		7.54		1.28		3.67	
df	1		1		1		1		1		1	
p	.190		.639		.419		.006*		.257		.055	

Here the only significant difference is between AA's and CON's with a strong trend for DA's and CON's. There is almost twice the proportion of AA as SP girls.

The issue of bad dreams which wake the child at night has also been investigated for the girls' sample. The results are presented in Table (119).

Table (119) Bad dreams which wake the child (self report) - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
Yes	4	8	4	22	4	41	8	41	8	22	22	41
	21%	47%	21%	45%	21%	38%	47%	38%	47%	45%	45%	38%
No	15	9	15	27	15	67	9	67	9	27	27	67
	79%	53%	79%	55%	79%	62%	53%	62%	53%	55%	55%	62%
χ^2	2.73		3.29		2.01		.509		.023		.674	
df	1		1		1		1		1		1	
p	.098		.069		.155		.475		.877		.411	

This table indicates that, though there are trends in the case of SP/AA and SP/DA, there are no statistically significant differences among these groups. This is quite against prediction. These findings reveal that the SP group report a smaller proportion of pupils experiencing bad dreams which wake them in the night - even smaller than the CON group.

Data from the parental questionnaire on bad dreams is reported in Table (120) for the SP and CON groups.

Table (120) Bad dreams which wake the child - Parental report - GIRLS

	Yes	No	χ^2	df	p
SP	10	9			
N=19	53%	47%	5.11	1	.023*
CON	5	20			
N=25	20%	80%			

*significant at or beyond the .05 level

As with boys analysis of parental report data indicates that the parents of the SP group report a significantly higher incidence of bad dreams which wake the child at night. Parental report also tends to underestimate the proportion of CON's who regard this as true of themselves. Unfortunately parental data are available on only these groups. Comment cannot therefore be made on the AA and DA groups though pupil self-report data is available for all groups.

The issue of whether the pupils in the various groups have a bedroom to themselves was also investigated for girls having been found to be a relevant dimension for the boys. It is clear that problems with sleep could well be influenced by whether the pupil has a bedroom to herself. Table (121) reports the results of this analysis.

Table (121) Bedroom to self - GIRLS

	SP	AA	SP	DA	SP	CON	AA	CON	AA	DA	DA	CON
N=	19	17	19	49	19	108	17	108	17	49	49	108
YES	10	12	10	38	10	84	12	84	12	38	38	84
	53%	71%	53%	78%	53%	79%	71%	79%	71%	78%	78%	79%
NO	9	5	9	11	9	23	5	23	5	11	11	23
	47%	29%	47%	22%	47%	21%	29%	21%	29%	22%	22%	21%
χ^2	1.2		4.09		5.70		.525		.333		.017	
df	1		1		1		1		1		1	
p	.269		.043*		.016*		.468		.563		.893	

*significant at or beyond the .05 level

As with the boys it can be seen from this table that significantly fewer SP's have a bedroom to themselves. The pattern of results however is not identical. Here the difference between SP's and AA's is not statistically significant. The SP's do however differ from each of the other two groups. The remaining groups do not differ from each other.

Finally the only other data relating to night/bedtime concerns whether or not the child bedwets. This was sampled via the parental questionnaire. Data are available from parental questionnaire only on the SP and the CON groups. However here no parent in either the SP or the CON group nominated this as a problem thus no analysis was undertaken. This finding on bedwetting with girls is in marked contrast to the results with boys.

SUMMARY OF RESULTS - GIRLS

Analyses of the data from the girls' groups indicate that 89% of SP's, 71% of AA's, 63% of DA's and 50% of CON's report some difficulty in sleeping. The figures are rather different when viewed in terms of frequency. Here the highest frequency is the 47% recorded by the SP group the other three groups ranging from 8% to 12%.

Parental questionnaire data are available only on SP's and CON's. This reveals that the parents of 68% of SP's regard them as having difficulty sleeping whereas only 40% of the parents of CON's so regard them.

Looked at only in terms of pupils regarded as having frequent difficulties sleeping the above figures become 31% and 4% respectively.

Against prediction the SP's proved to be the group who reported the smallest proportion experiencing bad dreams with only 21% of this group so reporting compared with 47% of AA's, 45% of DA's and 38% of CON's. Parental data are in line with this with the parents of 53% of SP's noting this in comparison to 20 of parents of CON's.

SP's significantly differ from both DA's and CON's in having a lower proportion who have a bedroom to themselves. Though a larger proportion of AA's have a bedroom to themselves this difference is not statistically significant. Bedwetting is not reported for any girl.

DISCUSSION BOYS AND GIRLS

The various sub-hypotheses of hypothesis 3 pursued the notion of interpersonal difficulties and their sequelae as over-represented among pupils more anxious about school attendance. The issue of sleep difficulties has been singled out for treatment as a spearate hypothesis for two main reasons (a) Night-time and sleeping are a unique transition between one day and another. Outside boarding schools it almost always takes place in the child's own home. It has the flavour of mystery and vulnerability about it and (b) experience of working with school phobic pupils has suggested to the writer that sleeping difficulties are common in this population.

While sleep problems seldom seem to have been the direct focus of investigation in school phobia research none the less various writers have commented on an over-representation of sleep problems in the SP population (Goldberg 1953, Chazan 1962, Blagg 1979). Apart from the literature on school phobia it has been suggested that stress related problems are highly associated with complaints about sleep especially difficulties with sleep onset and unwelcome reawakenings (Thomas 1976).

The findings of the present study indicate that 86% of SP boys and 89% of SP girls report difficulty getting off to sleep compared with 45% of CON boys and 50% of CON girls. Some 67% of AA boys and 71% of AA girls report sleep difficulties as do 59% DA boys and 63% of DA girls.

The above findings are very much in the predicted direction with the highest proportion experiencing sleep difficulties being in the most anxious group and the lowest proportion in the least anxious group. Given that this seems readily established one must seek a means to account for it. The clinical literature indicates that there is evidence that anxiety and depression are associated with sleep problems in children as in adults (Pearce 1977, 1978).

However in situations such as this it can in practice be very difficult to determine what (if any?) is the direction of effect. Are sleep problems caused by anxieties relating to school attendance or are children prone to sleep problems more likely to become anxious about going to school? Common and clinical experience suggests that failure to get off to sleep means less sleep and the possibility of being tired and more irritable and under-resourced in the mornings. It also furnishes an opportunity for the ruminating individual to amplify his or her fears. It is therefore quite reasonable to expect a greater frequency of sleep problems to be associated with more anxious pupils.

Examination of the present data reveals that frequency is a relevant issue with 30% of SP's boys reporting that they 'frequently' have sleep difficulties and a rather higher 47% of SP girls so reporting. AA boys reveal a 24% rate while with AA girls this drops very considerably to 12%.

For both girls and boys the figures for DA's and CON's are very similar ranging from 7% to 10%. The implication here is that somehow the anxieties in regard to school are associated either causally or otherwise with difficulties getting off to sleep. If 'frequency' can be construed as an index of seriousness than the most anxious groups have a dramatically higher frequency of occurrence. It is important to remember in seeking to interpret any such data that sleep and wakefulness are interdependent and that a proper assessment of sleep difficulties requires an evaluation of daytime events and processes as well as those occurring at night-time (Coates et al 1981).

Examination of the data from the parents of SP, DA and CON boys shows an increase in the proportions of SP's marginally to 92% but a decrease for DA'S to 39% and for CON's to 22%. The picture with girls is of the parents of SP's reporting a very similar figure of 68% to the self report figure of 71%.

Differences between parental and child report for boys are amplified by the 'frequency' dimension. The parents of 48% of SP boys report sleep problems as frequent compared with a 30% self report rate. Note however that 10% of CON boys report that they have frequent problems with sleeping whereas the parents of only one CON boy nominate this. With girls the picture is reversed with a higher 47% reporting frequency of problem compared with a 31% parental report rate.

It is difficult to account for some of these differences. One might have expected closer agreement between parents and pupils among the SP groups simply because the various aspects and dimensions of the syndrome are likely to have been discussed in considerable depth by the professional workers involved. The situation with the CON groups may reflect that the parents of generally happy, well functioning adolescents may know little about their feelings other than the vague notion that all seems to be well or it may reflect that the problems are not serious for this group. It should be borne in mind however that is not uncommon to find marked differences between parents and children in reporting such symptoms (Edelbrock et al 1986).

One potentially important dimension in terms of sleep difficulties is the question of whether the pupils have bedrooms to themselves. The present study revealed a smaller proportion of SP's to have a room of their own. Whereas 90% of AA boys and 71% of AA girls have a room to themselves, and 84% of DA boys and 78% of DA girls so report this appears to be the case with only 57% of SP boys and 53% SP girls. Among CON's the figures are 72% and 79% for boys and girls respectively. Coates et al (op cit) include overcrowding on their list of problems connected with sleep disturbances and Tibbenham (1977) argued that within each social class poor attendance is associated with overcrowding. He felt that overcrowding might lead to bad sleeping habits and stress.

The argument in terms of overcrowding tends to make the assumption that the SP's have no option but to share a room. The present study did not collect data on this point. It may be that the SP child opts to share a room with a sibling or indeed with a parent because of their anxieties. It is possible that sleeping problems lead to this option being seen as something of a solution. It is thus important to examine other aspects of sleeping problems besides difficulties in getting off to sleep.

Another reported aspect of sleep difficulties is unwelcome reawakenings. This however proved to be a very common occurance overall being reported by 86% of SP boys, 74% of SP girls, 86% of AA boys, 82% of AA girls, 79% of DA boys, 86% of DA girls, 67% of CON boys and a higher 85% of CON girls. The differences reached statistical significance only for SP/CON boys - no significant differences being reported among the girls. Night-time waking and difficulties getting off to sleep are two of the commonest stress related problems (Thomas 1976).

If one seeks to highlight the importance of this issue by concentrating on higher frequency of night-time waking an interesting picture emerges. Among SP's 23% of boys and 21% of girls report a frequency of nighttime waking of 2+ per week. These figures rise among AA's to 39% of boys and 41% of girls. With the DA groups the figure is 36% for boys but drops to 26% for girls. Parallel figures for the CON groups produce rather lower figures for both girls and boys with only 10% boys and 14% girls reporting this.

The differences between the AA and CON groups is statistically highly significant for both girls and boys. The differences between the DA and CON groups is also highly significant for boys and represents a strong trend for the girls' data.

Why should a smaller proportion of SP's than AA's report frequent night-time waking? Though the differences do not reach statistical significance the direction is very much against prediction. It may be that being anxious about school and yet maintaining attendance keeps anxieties at a higher level and thus affects sleeping in a higher proportion of cases. What is required are a wider and more detailed data to evaluate whether the anxious groups have a similar pattern in holiday time as in term time. Clinical experience indicates that at least some SP's sleep better in the holidays with tensions building up toward the start of the term. There is also some evidence that pupils in general sleep less in term time. In a study of 10 to 13 years olds it was found that sleep on non-school nights remains constant during this period whereas sleep on school nights decreases significantly between 12 and 13 years (Anders et al 1978).

Another factor which ought to be controlled for relates to the level of treatment of the SP groups eg one would predict that treatment or intervention plans which involved active planning of a return to school might generate more sleep related problems.

The question of bad dreams was also raised. It is interesting to note here that the figures for SP boys and girls are an identical 21%. The figures for AA's are also similar and notably higher for boys and girls. However the difference between SP and AA boys is statistically significant whereas the difference for girls falls short of significance. In general the figures for girls outside the SP group are higher ranging from 38% to 45%.

It must be said that with the exception of the CON groups that all of the figures for bad dreams seem high when compared with the evidence of large scale epidemiological work. Shepherd et al (1971) report that by age 14 years only 10% of boys and 14% of girls among normally developing pupils are felt by their parents to have bad dreams or nightmares. It seems from their study that frequent nightmares are uncommon at all ages being reported for only 7 boys and 5 girls on their sample of over 3000 in the 5 to 15 year age range.

In the investigation into other childhood fears undertaken in the present study (Hypothesis 2), fear of the dark was reported among SP's by 13% boys, and a dramatically larger 47% of the girls. With AA's 19% of boys and again 47% of girls report this whereas with DA's an identical 25% of boys and girls indicate fear of the dark. Among CON's only 6% of boys acknowledge fear of the dark compared with 33% of girls. Fear of the dark was also found to contribute to group discrimination in the Discriminant Function Analysis.

While nightmares/bad dreams are associated with REM (Rapid Eye Movement sleep) and can thus occur during any of the many REM periods throughout the night, bedwetting is regarded as a disorder of arousal being associated with an atypical arousal pattern in deep (stage 4, slow wave) sleep (Coates et al 1981). Among boys, bedwetting is reported by 23% of their parents but by only one of the parents of DA's and by none of the parents of the CON group. No girl in either of the SP or CON groups (the only groups on whom data are available) is reported to bedwet.

In general there is evidence of a decline in bedwetting with increasing age in normally developing children with the figure for the 13 year old age group being somewhat under 3% (McConachie 1955). It must be pointed out, however, that the decline in bedwetting is not so apparent in the Child Guidance Clinic population (Barbour et al 1963) though perhaps this should not be surprising since enuresis can be a category of referral to these clinics.

Underlying all of these somewhat fragmented findings on sleep problems there is a general thrust in the direction of those pupils anxious to any degree about school attendance being more prone to experience such problems and if experiencing them at all to be more likely to do so more frequently. Present data do not however permit a clear resolution of the direction of cause. It remains to be said however that sleep and related night-time problems are clearly an area ripe for further investigation.

CHAPTER 8 SUMMARY

This study has been an attempt to evaluate the extent to which School Phobics (SP's) share fundamental features with other pupils anxious about school but who none the less maintain good attendance. The author's clinical experience working with such pupils led him to question the sharpness of the distinction between school phobics and other children with anxieties or attendance problems. It was also in part inspired by a methodological concern relating to the extensive use of 'truants' and 'normally attending' pupils as Control or Comparison groups in much of the published research.

The literature was culled for diagnostic and other features of School Phobia and for attempted definitions. These were abstracted and incorporated in a pupil questionnaire. A parental questionnaire was also devised and data obtained from teachers by use of the Rutter Child Behaviour Scale. Additionally Ravens Progressive Matrices were employed as a measure of ability and a specially constructed Sociometric instrument used.

A Typology of school attendance anxieties was proposed involving 5 groups of pupils representing differing levels of anxiety from those severely affected to those who are anxiety free. To test the validity of this typology a battery of measures was administered to 30 School Phobic boys and 19 School Phobic girls who all met the clinical and research criteria advocated by Berg et al (1969).

Furthermore the initial classification was strengthened in being confirmed by a second opinion from either another child psychologist or a child psychiatrist. On the basis of those features which seemed to define the anxiety in regard to school attendance a group definition of the school phobic as a pupil experiencing the joint occurrence of general, ill defined anxiety regarding school and frequent psychosomatic symptoms which the pupils themselves regarded as serious, emerged. It was hypothesized that pupils displaying this pattern of anxiety would be found attending normal mainstream schools. Given the nature of the definition this group was named the Anxious Attender group (AA's).

A further group definition was produced involving generalized anxiety regarding school but without the experience of any psychosomatic symptoms. This group was known as the Diffuse Anxiety group (DA's). Another group experiencing psychosomatic symptoms but no general anxiety was known as the Psychosomatic Symptoms Only (PSO) group. Finally a group defined by the absence of any generalized anxiety or psychosomatic symptoms was nominated as an anxiety free control group (CON's).

Preliminary exploratory factor analysis of the pupil questionnaire and sociometric data had indicated large and significant differences by sex of pupil. It was therefore felt appropriate to analyse all data separately by sex.

The test battery devised was administered to a random sample of 225 boys and 261 girls between the ages of 11 and 16 years. These pupils were drawn from four comprehensives in one London Borough. The schools were also chosen at random.

School Phobics were already confirmed as a definable group. These pupils however came from a very wide spread of schools throughout the same Local Education Authority. The above group definitions were applied to the separate samples for girls and boys. This approach confirmed the existence of three of the hypothesized four groups. Firstly the AA group emerged. These represented some 9% of the total number of boys and 7% of the total number of girls. The DA group also emerged. This consisted of 20% of the boys and 19% of the girls. Anxiety free CON's accounted for 39% of boys and 41% girls. The PSO group represented only 2% of boys and 3% of girls and, since this involved very small absolute numbers, was not further considered.

The validity of these groups was confirmed by a series of Discrimininant Function Analyses on data not involved in the group definitions. Very strong additional support was obtained from the high level of accuracy of reclassifying pupils to correct groups on the basis of parental questionnaire data and teacher completed Rutter Scales.

Given that these groups could be significantly discriminated from each other the task of exploring further where the most psychologically relevant differences lay was justified. It is not proposed here to repeat the mass of detailed findings from the main body of the dissertation but rather to draw out major findings in summary form.

Hypothesis 1 examined the four groups (SP's, AA's, DA's and CON's) in terms of potential age, ability and social class differences. As with all of the reported findings separate analyses are undertaken by sex. The four groups were found to differ significantly on age and IQ for both boys and girls. The general thrust of the findings was in the direction of the more anxious groups (SP's and AA's) being younger and statistically less intellectually able as measured by the Ravens Matrices. The groups did not, however, differ from each other in social class make-up or, in the case of the SP's, from the social class composition of other SP groups in the published literature. Though one might question the direct impact of IQ differences of a few points in terms of achievement and satisfaction in the routine life of the school the existence of these age and ability differences has to be considered in interpreting the significance of other findings.

The initial literature review has revealed that, aside from intermittent assertions that SP's have other fears, there appeared to be no systematic investigation of this issue. Even if evidence existed regarding the frequency of fears among school phobics it would be difficult to interpret the significance of this without data regarding the nature and frequency of fears among non-phobic children from similiar schools and backgrounds. Hypothesis 2 in the present study investigated this issue.

No significant differences were found among the groups when assessed either in terms of the presence or absence of a fear or of total number of fears revealed. However 'fear of the dark' and 'fear of going out' in weighted combination with other variables make a contribution to the total discrimination. In general, it would seem that a proneness to fears is not an important part of the life of the SP or of either of the other groups displaying anxiety regarding school in the present study. One must therefore seek the significant differences elsewhere.

This process is begun in Hypothesis 3 which pursues the possibility that, for some pupils anxious about attending school, there may be difficulties in making and maintaining friendships. The initial test of this hypothesis reveals that 40% of SP boys and 53% of SP girls report such friendship difficulties as do 29% of AA boys and 47% of AA girls. A further 13% of DA boys and 18% of girls and 9% of CON boys and 12% of CON girls also report difficulties in this area.

The evaluation of subsidiary hypotheses found no significant differences in terms of the age of friends or sex of friends for boys but a complex pattern of differences for girls. There is also a pattern of significant findings for both boys and girls in terms of whether their friends come from their school.

Since it can be reasoned that concern regarding friends may contribute to anxiety in the school situation a Vulnerability in School measure was specially created. There proved to be significant differences on this variable with AA's displaying most vulnerability for both boys and girls. That this vulnerability relates to factors apart from satisfaction with school work and belief about how teachers and parents judge them is seen in the lack of significant differences on the General Satisfaction with School scale.

The above data all relate to pupil self-perception. However sociometric data are available for the AA, DA, and CON groups. These data were found to permit a significant discrimination into the groups of origin for both boys and girls. This represents a form of external validation for the pupils views. Despite this the groups do not differ significantly on specially devised Popularity and Rejection measures with the exception of AA girls who are higher on the latter measure.

The impact of these difficulties might be expected to make a difference in terms of choice of spare time activity. However this proved to be so only in terms of 'attending a club' for boys and 'attending a club', 'listening to records and radio', and 'other' for girls.

Given that the pupils are anxious regarding school but not prone to other fears and that a higher proportion of the more anxious pupils report friendship difficulties and vulnerability in school one might predict a higher motivation for the school avoidance strategy of staying off by pretending to be sick. This did not prove so in the present study for either boys or girls.

However the situation is very different in regard to self confessed truancy. Here 58% of CON boys admit truancy, as do 30% of SP's, 19% of AA's and 4% of DA's. With girls a different pattern and level of such self confessed truancy emerges with only 7% of CON girls admitting this compared with 5% of SP's, 12% of AA's and 26% of DA'S.

The above summary of the results of the analysis by group membership has been in terms of pupil self-report of feelings about (or in) school. Hypothesis 4 broadens the situational base to include the possibility that these anxieties regarding school attendance have an impact at home. This area is sampled via an investigation of self reported sleeping and other night-time difficulties.

Some 86% of SP boys and 89% of girls report difficulties getting off to sleep as do 67% of AA boys and 71% of girls. The percentages drop somewhat among DA's to 59% of boys and 63% of girls and are still lower for CON's with 45% of boys and 50% of girls so reporting. When these data are analysed in term of frequency of sleeping difficulties the pattern is even more pronounced.

The issue of unwelcome night-time waking reveals a complex situation for boys but not significantly so for girls. Similarly the situation is more complex for boys than girls in the case of Bad Dreams.

Finally in this section the more general but related question of having a bedroom to oneself proved highly significant with most of the significance being attributable to the surprisingly low proportion of SP boys and girls having this facility. Only 57% of SP boys and 53% of girls claim to have a room of their own while 90% of AA boys and 71% of AA girls and 84% of DA boys and 78% of girls and 72% of CON boys and 79% of girls have their own room.

Throughout this brief summary of the main direction of the findings in the present study an attempt has been made to maintain a conceptual thread while acknowledging the complex issues involved. The question must now be asked as to how these findings intermesh with existing published work. This issue is perhaps best approached via a summary return to the primary issues under investigation.

Firstly there is the question of the incidence of school related anxiety. The speculation in the literature that the clinically defined School Phobic population may be the 'tip of the ice-berg' (Heath 1983, Hersov 1979, Waldfogel et al 1956) seems to have been substantially borne out by the identification of the AA and DA groups.

Having determined that there are these validated sub-groups of pupils with anxieties in regard to going to school but maintaining good attendance, considerable interest centres on how they differ from clinically defined SP's and from anxiety free controls. No other study has come to light which controls for anxiety level in the school attending population.

Given the demonstrated existence of the three mainstream school attending groups the present study sought to get a more rounded picture of their similarities and differences by exploring a number of dimensions identified as relevant in the literature. Two forms of data triangulation are utilized here - one by data source including parents and teachers in the informational pool to augment the pupil self report data and the other by domain of the child's life comparing his or her friendship universe with the world of spare time activity and possible night-time sequelae in the form of sleeping and other related difficulties.

Initially, however, a set of demographic investigations is undertaken. Social Class, known to be an important variable with school attendance problems in general (Fogelman and Richardson 1974, Galloway 1980, Reid 1980), did not prove to be a relevant feature with regard to the anxious groups defined in this work. In particular the utilization of Heath's careful comparative data (Heath 1983) indicated that the present sample of school phobics does not differ from other recent samples of British school phobics in regard to the social class compostion of the sample.

Age however proved to be highly relevant in the present study confirming Milman's assertion that the significance of school phobia should not be considered apart from the chronological age of the child (Milman 1961). The present findings in this regard are largely congruent with the main thrust of the published research findings of more anxious pupils being somewhat younger (Hersov 1960, Blagg 1979).

The finding that the SP's and AA's (the more anxious pupils regarding school attendance) are somewhat less able though still average is in line with much other work (Johnson et al 1941, Estes et al 1958, Heath 1983). One must however be mindful of Hampe et al's thorough work which found a normal distribution of ability among school phobics. They warn that professional workers sometimes treat the same symptoms of anxiety in pupils of lower ability as due to something other than school phobia (Hampe et al 1973).

The final demographic variable to be considered is that of sex of subject. In this study all data were analysed separately by sex. There is a growing speculation in the literature that school phobia may be a somewhat different phenomenon in boys than in girls (Heath 1983) with a different longer term prognosis (Tyrer and Tyrer 1974). In the present work the factor analysis of the measuring instruments substantiated the need for analysis by sex and the different patterns of findings validated this decision.

Beyond the above demographic overview a number of individual hypotheses were pursued. The first of these relates to the possibility that the school phobic reaction is merely a legally more important part of a general proneness to anxiety and fears. It is said of the school phobic child that 'typically' he has other fears (Eisenberg 1958a) or is 'expected' to have other fears (Van Houten 1948), or 'with few exceptions have other phobias' (Talbot 1957) and that these other fears or phobias may be of a 'wide range' (Frick 1964). These assertions are found to be substantially without validity. It is interesting to note that the present work appears to be the first to investigate the 'other fears' of school phobics at an empirical level.

Having determined that school phobia does not appear to be just another exemplar in a wider constellation of fears the present study turned to other aspects of the school situation. School phobic's themselves point to aspects of their school experience to account for their problems (Hersov 1960, Smith 1970, Chazan 1962, Blagg 1979).

Friendship issues had emerged from the literature and from the writer's clinical experience as potentially one of the major dimensions to be investigated (Langford 1937, Van Houten 1948, Shapiro and Jegede 1973). The results from the present work confirm that this is so. However, even if one regards the higher proportions of pupils anxious about school who report friendship difficulties as a likely under reporting, and even if it is acknowledged that some pupils with difficulties in this area may not recognize it in themselves, the fact that not all anxious pupils have friendship difficulties indicates that this area does not have a universal causal relevance.

The findings of significant differences on the specially created measure relecting Vulnerability in the School setting is in line with work on school features. Significant proportions of school phobics nominate aspects of their school experience as either causing or contributing to their anxieties about attending (Hersov 1960, Goldenberg and Goldenberg 1970, Heath 1983). That this sense of *vulnerability is not determined* by a feeling of not coping academically or enjoying the more formal subject related aspects of school is reflected in the lack of significant differences on the specially created General Satisfaction With School Scale. Previous work had failed to find differences between school phobics and school attenders on an Anxiety in the Classroom and a Fear of Failure Scale (Heath 1983).

The issue of a base to friendship difficulties in some form of external reality rather than exclusively in terms of pupil self perceptions was explored. This failed to produce evidence of significant differences in terms of individual Popularity and Rejection scores on a sociometric instrument though the sociometric data in weighted linear combinations were found to differentiate among the groups. Largely the present findings are in keeping with the only other work on school phobia which has used a sociometric approach (Ojanen 1980).

Whatever the comparative rate of interpersonal anxiety it is important to examine the evidence in terms of impact on attendance either by school avoidance by pretending to be sick or by truancy.

No significant differences in terms of the self confessed strategy of pretending to be sick were found. This is against prediction based on the literature where there is evidence in regard to pupils on home tuition that more than half are actually fit for school (Wallace 1955). Furthermore it has been suggested that there is a paediatric masquerade syndrome involved in school phobia with psychosomatic symptoms diverting from the anxiety issues (Waller and Eisenberg 1980) and the much earlier discovery of an association between such psychosomatic symptoms and low sociometrically defined status (Izard 1959).

More importantly than pretending to be sick the strategy of truancy emerged as relevant in the present work. Despite the existence of an influential definition of school phobia including non-truancy as a part of the definition (Berg et al 1969) truancy emerged as significant. The traditional distinction between truancy and school phobia (Broadwin 1932, Hersov 1960) clearly needs to be re-examined.

In order to provide a more holistic picture of the anxious childs world the impact of the anxieties on his or her sleep pattern was examined. Sleep difficulties were chosen since not only does sleep represent a relatively high proportion of the 24 hour cycle and defines a transitional phase between one day and another but sleep difficulties are a sensitive indicator of emotional problems (Thomas 1976), and a number of writers have commented on their importance within a school phobic population (Goldberg 1953, Blagg 1979).

The findings in the present study are in line with the published work in this respect and confirm the usefulness of sleep difficulties as a clinical indicator of things potentially being amiss in the child's psychological world.

Having relocated the most important findings from the present study within the parent literature if may be helpful to comment briefly on the implications of these findings for the major theories of school phobia. Though this study was not designed expressly to test particular theories it is helpful to make such comment here before attempting a synthesis of these findings into a working model.

In relating the present findings to theories which give prominence to separation from parents as the major aetiological feature little support is to be found - however plausible the ideas may be in relation to anxieties experienced by young children when they first start school. The peak incidence of school phobia in British work is between 11 and 13 years - normally after several years of parting from home and parents to attend primary school. This bears testimony to the lack of general utility of the separation theory approach.

Furthermore if separation anxiety were the dominant causal feature one would expect it to feature more in the pupils own explanations and to influence where the anxious child is when not in school, and the level of anxiety he or she experiences for his or her parents' welfare while they are in school. Nor would we expect the pupils to be able to separate at times other than for school attendance. Finally it would seem implausible if this model accounted for much of the variance to be able to discriminate among these groups using teacher, sociometric and pupil questionnaire data not reflecting such anxieties.

It is of course possible that pupils who for whatever reason, cannot maintain school attendance may become more dependant on their parents and that they may in some instances come to rely on the presence of the parent to assuage their anxious feelings. In a sense one could argue that in such cases a more coherent picture emerges if the school phobia is viewed as causing separation anxiety rather than the reverse.

In summary while aspects of separation anxiety theory may have utility in some aspects of particular cases the empirical and conceptual evidence from the present work suggests that it is a marginalized theory in terms of accounting for school phobia lacking both comprehensiveness and coherence in explaining the known facts.

Learning Theory based approaches are commonly juxtaposed with more psychodynamic and separation anxiety based theories. Once again it must be stressed that the present study is not designed specifically to test these theories though, as with the above, there are implications from the findings.

Firstly it must be said that school phobia is unlikely to be a learned behaviour in any simple sense. If it were thus learned there would be a much higher frequency of school phobics emerging from the same family as they would not only see the behaviour modelled but share at least aspects of the family's dynamics and potentially attend the same school.

Similarly the importance of modelling of behaviour would lead one to expect overall a higher rate of school phobia in classes where there was at least one phobic. Neither of these are borne out in general experience though there are particular cases in which it may be so. .

Secondly the existence of the Anxious Attender and Diffuse Anxiety groups demonstrate that having a constellation of anxieties similiar to clinically defined phobics does not necessarily lead to non attendance.

Thirdly pupils who experience a range of educational failures and/or who are subject to either bullying or social isolation are not necessarily those who show anxieties about school or refuse to attend.

To argue that Learning Theories in general do not account either for the relatively low frequency of school phobia or for the range of precipitating factors which do not specifically involve traumatic incidents is not to say that notions such as avoidance or alternative and less demanding sources of reinforcement in the home or community contexts are not of importance to varying degrees in particular cases. Furthermore there is a sense in which notions such as friendship making can be construed as skills and that failure in such areas can represent the failure to learn these skills.

The suggestion here is that while Learning Theories do not straight-forwardly account for the development of school phobia there is a sense in which all non trivial responses to situations must draw to some degree on past learning and each new reaction (including avoidance) potentially becomes part of the individual's repertoire.

In summary mechanisms emanating from the work of learning theorists such as reinforcement schedules, approach and avoidance and modelling must be involved to some extent in the genesis of school phobia. However the implication of the present work is that this is not necessarily in the form of a direct causal mechanism.

Of the major theoretical systems called upon to account for the development of school phobia the two remaining to be re-examined in terms of the present work are the Phenomenological and the Systems/Ecological approaches. These theories were included in the overview of theories though they have not in themselves drawn comment from more than a very small minority of workers interested in school related anxieties. Their potential explanatory power is none the less considerable.

Under the umbrella heading of Phenomenological as used in this study are all those facets of the problem which pertain to pupil perceptions - whether these perceptions relate to themselves as in having friendship difficulties or to the family as in which parent they feel they relate to best, or to the school as in whether they like school or feel bullied etc.

Theories accounting for school phobia such as those espoused by workers within the separation anxiety model start from a given point of view in relation to aetiology and thus from the beginning appear to limit and possibly impoverish their own information base. Phenomonological theorists on the other hand generate a potentially unmanageable and cloying richness of data which would seem to (in extremes) condemn workers to an almost exclusively idiopathic approach.

The evidence from the present work is more optimistic in this regard. Here the importance of pupil self perceptions is very clearly established. The group definitions are based on pupil self-report data regarding their feelings of anxiety about attending school. However it is very significant that these phenomenologically defined groups can subsequently be validated against family, teacher and sociometric data. This very strongly suggests that the pupil self appraisal taps into some definable, external reality base rather than a largely inaccessible privately constructed world.

In summary phenomenological approaches have a clear role to play in understanding the totality of the child's anxious response to school. The individual perceptions of what is happening to him or her will have a potentially very strong effect on feelings and behaviour and appear, on the basis of the present work, to be a fundamental prerequisite of being able to make attributions.

Finally we look at the area of Ecological/Systems theories. Though few workers in the field of school phobia have made much explicit use of such a theory or set of theories (certainly have not much used the language of such theories) much of the published literature can readily be seen to relate in varying degrees to the child's ability to function within a setting which involves routine contact with other pupils in the school setting.

Mostly there is the assumption that a group setting (a group here being defined as a rule governed combination of others) exerts both positive and negative influences on the individual and his or her behaviour, feelings, perceptions etc. While individual characteristics are often formally evaluated by psychometric or other means there is less specificity of the organizational/situational dimensions. If the social ecology of an individual's functioning is to be credible as a causal source as opposed to a framework within which the individual operates then a fuller attempt to classify major features, mechanisms and influences is needed.

In this regard a helpful start has been proposed by Kulka and co-workers. They discuss what is in effect a multi-axial classification of any situation. Here the axes they propose are the Objective Environment ie the environment seen from the perspective of an external reality independent of the perceiver, the Subjective Envirnoment ie the environment as it is uniquely seen by the individual who interacts with it, the Objective Person ie the 'real person' as seen by others in terms of build, attractiveness, ability etc and the Subjective Person ie the person as they see themselves along either the same or unique dimensions (Kulka et al 1980).

Such a framework should prove viable in the present situation. However, though it goes helpfully beyond micro-organizational description, it is still complicated by the need to specify more fully the rules by which the components of the implicit nested hierarchy interface eg do we look at a group of siblings as a system, within a wider parent/offspring context, within an extended family setting, within a local cultural framework, within social class parameters and so forth through at least to national level.

In summary the ecological approach has a relatively high face validity as an approach when one is looking at a clinical condition which relates to the child's difficulty in coping with being with others. However it achieves this face validity at the cost of considerable generality and some pronounced difficulties in being able to operationalize the necessary connections between different levels within a complex set of systems.

Within the framework of available theories and their attendant literatures and the set of empirical findings from the present work the question arises as to whether some form of coherent synthesis of these findings can be elucidated. It seems that the answer here may be a cautious 'yes'.

CHAPTER 9 TOWARDS A SYNTHESIS

It has proved possible to define 4 groups by the degree of self-perceived anxiety experienced in regard to school attendance and to validate these groups from pupil, parental, teacher and sociometric data. As aspects of intergroup differences have been explored a model which might account for some of these difficulties begins to emerge. This model is essentially based on theories of stress and coping with social stressors being one of the dimensions nominated as important.

Schematically this model may be outlined as follows. The child comes to any situation (in this case school) with a unique personal profile of strengths and weaknesses and a hierarchy of coping strategies. When faced with some form of challenge (or more strenuously conceived - threat), he or she experiences a degree of alerting anxiety. The initial response is to draw on the preferred problem solving strategy which is likely to be one which has been used successfully in the past under similar circumstances.

If this customary coping strategy does not prove adequate to the present task a crisis may begin to generate (Straker 1980). The individual's level of anxiety rises and he or she mobilizes other resources. If the crisis persists he or she may become tense, cannot sleep, is fatigued, may be distressed and disorganized and seems helpless (Caplan 1964).

If no solution or appropriate support is forthcoming the continued failure to resolve the problem or feeling of threat further increases tension and possibly the institution of novel, trial and error type of responses of an increasingly panicky nature. If/when these do not work sufficiently well to solve the problem the anxiety increases faster since the individual 'knows' that he or she has exhausted their personal and other accessible resources. A critical point is reached and the distress and disorganization is clearly manifest to all. At this point he/she either breaks down or withdraws into an avoidant pattern.

There is nothing new or revolutionary about this notion though what may be novel is its application to school phobia and general anxiety about school. Erikson (1965) has written extensively about transitional or maturational crises - the crisis common to the adolescent period being that of identity formation. Jacobson (1980) introduces the helpful notion of a crisis matrix which emphasizes the interplay between internal and external factors in triggering crises. He feels that the Eriksonian developmental crises are stages rather than crises in themselves and argues that they represent a period of internal reorganization which renders the individual particularly vulnerable to external events and hazards.

More directly applied to the early adolescent school child the model would include the following features. The child is undergoing a number of highly significant changes not always in a very synchronized way. He or she is likely to be entering or adjusting to the biological and hormonal changes of puberty. He/she has entered a new and differently organized and more taxing level of schooling, he/she is adjusting to the impact of an enriched and more flexible level of thinking (formal operational thinking) which may bring with it a new range of possibly more abstract fears. As he/she moves towards and into adolescence he/she will come more to experience a pressure towards emphatic relationships with an increasing emphasis on self disclosure (Bigelow 1977). Without the security of established relationships (or the belief in one's own capacity to develop and maintain this base) pupils experience anxiety and stress. This is likely to be at a maximum when the social groupings are dictated other than by personal choice - very much what transpires in schools.

It has been postulated that depression may arise from the development of negative self perceptions, current experience and foreboding beliefs about the future (Beck 1974), whilst, at the same time, it is suggested that there is developmental evidence that self-concept disruptions and depressive tendencies most frequently occur in early adolescence (Rosenberg 1979).

Depression has been implicated in the genesis and maintenance of school phobia (Campbell 1955, Agras 1959, Frommer 1967, Waldron et al 1975, Gittelman and Klein 1971, Blagg 1979) and more recent non-clinical work highlights the fact that different senses of self are engendered by the differing contextual demands of home and school (McGuire et al 1986).

One has to account for the fact that not all pupils who experience marked anxiety about school refuse to, or otherwise fail to attend. Here the evidence on those children who seem able to deal with very considerable environmental and personal adversity - the so called stress-resistant children - is of importance.

The search for protective factors has indicated the following areas as important: special interests and hobbies; positive self-concept, internal locus of control, close peer friendships (Werner 1985). The implication of the present findings would seem to be congruent with the stress/coping model.

One must note however that the stress conceptualization, while having a high face validity, achieves this by recourse to considerable generality and the difficulty of operationalizing such notions as 'coping resource' must be acknowledged. It would be easy here to drift into circularity of reasoning and tautology of expression. Clearly this is an area which requires considerably more conceptual and empirical work.

It is worth the reminder here that throughout this study evidence has been adduced that the School Phobics and Anxious Attenders can be reliably discriminated from each other on variables other than that minimal configuration of symptoms of generalized anxiety and specific psychosomatic symptomatology used as part of group definitions. The pattern of these findings is different for boys and girls. A fuller understanding of school phobia may be gained by further work targeted on such differences. Five main areas for such work emerge from the present study.

(a) An in-depth investigation to examine the strategies used by School Phobics and Anxious Attenders in dealing with their situation. It may prove enriching to tackle this from an attributional theory perspective (Weiner 1979).

(b) A much more fine-grained exploration of the utility and validity of the State/Trait dichotomy as applied to the pupil with anxieties regarding school (Spielberger 1966). Similarly the power of the breakdown of the concept of anxiety into the components of worry and emotionality (Morris et al 1976) would merit further investigation targeted on school phobic and other anxious pupils.

(c) An extension of the idea of a continuum of anxiety regarding school to include other aspects of a rejection or non-valuing of school eg truancy and those pupils sometimes regarded as 'emotional absentees' (Frick 1964).

(d) The interpersonal dimension would seem a powerful focus for further work. The present study concentrated on pupil's self-perceptions of such difficulty while leaving largely unexplored the possibility that friendship maintenance may be a source of enduring concern. Furthermore the nature of the actual difficulties is unlikely to be unitary and no doubt further work will identify sub-types.

(e) Perhaps the most serious methodological weakness in the published work (including the present study) is the failure to control for the length of time (and stage of treatment) of the school phobic groups at the point of the researcher's evaluation. It may well be that being or feeling unable to attend school triggers lower self-esteem depression, fosters dependance etc rather than contributing to the causation.

Ideally a longitudinal study based on a population sufficiently large to sustain sub-groups of a viable size and which incorporated measures of the relevant dimensions identified in this and other work would clarify very many of these issues.

CHAPTER 10 IMPLICATIONS FOR PRACTICE AND FOR FUTURE WORK

In this concluding section it is appropriate to ask what are the implications for present practice both with school phobic youngsters and those pupils with anxiety but who none the less manage to sustain attendance and to nominate those areas most likely to yield fruitful data in future research.

Given the size and nature of the Anxious Attender group for both boys and girls there is an important need for an accessible and valid means of identification of this population by the schools themselves.

The measuring instruments used in the present study were either purpose built questionnaires fully reported in the text and appendices or readily available to teachers from major suppliers. Closed or restricted psychological tests were deliberately avoided. Thus using simple paper and pencil questionnaire instruments of known reliability and validity augmented by sociometric data should help a school or individual teacher with pastoral responsibilities to identify pupils experiencing anxieties in regard to school attendance.

In particular such concerned teachers could monitor for pupils who felt highly vulnerable in the school setting and who regarded themselves as having difficulty in making and maintaining friendships. The more objective reality of these difficulties could be appraised via sociometric techniques.

It is also very important for teachers to be aware that the anxiety can be heavily masked in that such pupils live with it on a daily basis and either do not or cannot reveal it unless it is elicited. It is entirely inappropriate to assume that it will be visible eg via the presence of other intrusive fears.

The fact that School Phobics and Anxious Attenders can be distinguished from each other and from less anxious pupils and from those who are anxiety free on data not involving anxiety and that this identification can take place across data domains strongly suggests that in school anxieties we are dealing with an over determined phenomenom - that is to say that there is no single unitary cause.

Within the model being proposed in this work any demand made on the individual which exceeds his capacity to cope from his or her available resources potentially contributes to the stress reaction. These stressors could be individual ie reading difficulties, familial ie marital discord between the parents, or psychosocial as in interpersonal difficulties. They lead potentially to anxiety reactions including both cognitive (worry) components and autonomic over arousal (dizziness, palpitations) which can be alarming in themselves. Thus the child anxious about school can come not only to fear the situations in which the stressors occur most directly but the physiological over arousal and what he or she may fear it heralds in terms of organic illness.

An implication of the foregoing is that every child who experiences anxiety about school is likely to need to be given a clear understanding of the physiological mechanisms at work and their psychosocial triggers.

There is a further implication that desensitization approaches which are aimed at getting the child back into the school building are unlikely to be successful in isolation. There is a need to examine the childs profile of strengths and weaknesses against the background of his or her habitual ways of responding. Their own nominated concerns should be taken seriously and dealt with appropriately.

Two further points need to be made here. Firstly the data from the present study make it very unwise to treat the underpinnings of school related anxieties as likely to be the same in both boys and girls. Both the different structure of anxiety reactions as revealed by the factor analysis of the pupil questionnaire data and the issue of different patterns of friendship within the school have to be taken into consideration. Secondly an uncritical use of published research which does not control for the level of school related anxieties may lead to some confusion.

The above implications for practice as they emerge from the present study in themselves need a cautious implementation until the findings have been replicated with other populations and some further work undertaken.

In conclusion then, the search for a school phobia syndrome, has in part been successful. What has become very clear however is that school phobia is not a simple, single, unitary condition. It is potentially a very different condition in regard to boys and girls and it reflects a range of presentational manifestations which seem best accounted for in terms of theories of stress and coping.

Much work remains to be done in order to move toward a fuller understanding of the interplay and interactions among the many complex variables and dimensions known to be of likely significance. The high level of distress, pain and confusion experienced by the families but most pointedly by the anxious youngsters themselves justifies giving this further work priority.

References

A.E.P. (1981) Members Handbook. Association of Educational Psychologists

AGRAS, S. (1959) "The relationship of school phobia to childhood depression" Am. J. Psychiatry. 116, 533-536.

ALDRIDGE-SMITH, J. (1974) "Personality of school non-attenders" Unpublished M.Sc. Thesis, University of Glasgow.

ALL, A. (1957) "A study of interaction between mothers, schools, and phobic children". Smith College Studies of Social Work. 28. p59.

ALLEN, F. (1955) "Mother child separation - process or event" in Emotional Problems of Early Childhood, Caplan, G (Ed), New York, Basic Books.

ANDERS,T.F., CARSKADON, M.A., DEMENT, W.C., and HARVEY, K. (1978) "Sleep Habits of Children and the Identification of Pathologically Sleepy Children". Child Psychiatry and Human Development, 9, 56-62.

ANGELINO, H., DOLLIN, J., and MECH, E.V. (1956) "Trends in the 'fears and worries' of school children as related to socioeconomic status and age". J. General Psychology, 89, 263-276.

ATKINSON, J.W. (1964) "An Introduction to Motivation" New York: Van Nostrand

AYLLON, T., SMITH,D., and ROGERS, M. (1970) "Behavioral Management of School Phobia". J. Behaviour Therapy and Experimental Psychiatry. 1. 125-138.

BAKAN, D. (1966) "The Test of Significance in Psychological Research". Psychological Bulletin, 66, No.6, 423-437.

BAKER, H., and WILLS, U., (1978) "School Phobia: classification and treatment". British J. Psychiatry, 1, 132, 492-499.

BAKER, H., and WILLS, U., (1979) "School Phobic children at work". British J. Psychiatry, 135, 561-541.

BAKWIN, H. (1965) "Learning problems and School Phobia". Pediatric Clinics of North America, 125, 995-1014.

BANNISTER, D. (1963) "The genesis of schizophrenic throught disorder; A serial invalidation hypothesis". British J. Psychiatry, 109, 680-686.

BARBOUR, R.F., BORLAND, E.M., BOYD, M.M., MILLER,A., and OPPE, T.T. (1963) "Enuresis as a disorder of development". British Medical Journal 2, 437

BARNES, M. (1963) "The problem of school refusal in a child guidance clinic". British J. of Psychiatric Social Work. 7, 76-83.

BARRIOS, B.A., HARTMANN, D.P., and SHIGETOMI, C. (1981) "Fears and Anxieties in Children", In Behavioral Assessment of Childhood Disorders, Mash, E.J. and Terdal, L.G. (Eds), John Wiley and Sons, New York.

BAUER, D.H. (1980) "Childhood Fears in Developmental Perspective", In Hersov, L., and Berg, I., (Eds) Out of School, John Wiley and Sons Ltd.

BAUER, N.J. (1971) "Differences in personality traits among the most preferred and least preferred students in grades 10, 11 and 12". Journal of Educational Research 65, 65-70.

BECK, A.T. (1967) "Depresion: Clinical, Experimental and Theoretical Aspects". New York: Hoeber.

BERGANZA, C.E. and ANDERS, T.F. (1978) "An Epidemiologic approach to School absenteeism". J. American Academy of Child Psychiatry. Vol 17, Part 1, 17-25.

BERG, I. (1980) "School refusal in early adolescence". In Out of School, Hersov, L., and Berg, I. (Eds), John Wiley and Sons, London.

BERG, I., BUTLER., FAIRBAIRN, I., and McGUIRE, R. (1981) "The Parents of School Phobic Adolescents - a preliminary investigation of family life variables". Psychological Medicine, 11, 79-83.

BERG, I., CASSWELL, G., GOODWIN, A., HILLIN,R., McGUIRE, R., and TAGG, G. (1985) "Classification of severe school attendance problems". Psychological Medicine, 15, pp157-165.

BERG, I., COLLINS, T., McGUIRE, R., and O'MELIA, J. (1975) "Educational Attainment in Adolescent School Phobia". Journal of Psychiatry, 126, 432-433.

BERG,I., and COLLINS, T. (1974) "Wilfulness in School Phobic Adolescents". British J. Psychiatry, 125, 468-469.

BERG, I., BUTLER, A., and MCGUIRE, R. (1972). "Birth Order and Family Size of School Phobic Adolescents". British J. Psychiatry, 121, 509-514.

BERG, I., NICHOLS, K., and PRITCHARD, C. (1969) "School Phobia - its classification and relationship to dependency". J. Child Psychology and Psychiatry, 10, 123-141.

BERLIN, I.N. (1965) "Working with children who wont go to school". Children Today, 12, 109-112.

BERNEY, T., KOLVIN, I., BHATE, S.R., GARSIDE, R.F., JEANS, J., KAY, B and SCARTH, L. (1981) "School Phobia: A therapeutic Trial with Clomipramine and Short-term outcome". British J. Psychiatry, 138, 110-118.

BIGELOW, B.J. (1977) "Children's friendship expectations: A cognitive developmental study". Child Development, 48, 246-253.

BLAGG, N. (1979) "The Behavioural Treatment of School Phobia" Unpublished Ph.D Thesis. University of London.

BOLMAN, W.M. (1967) "A behavioural systems analysis of the school refusal syndrome". American J. Orthopsychiatry, 37, 2, 348-349.

BONNARD, A. (1955) In 'School Refusal', Educational Research 3, 115-127.

BONNEY, M.E. (1943) "The Constancy of Sociometric Scores and their Relationship to Teacher Judgements of Social Success and to Personality Self-ratings". Sociometry, Vol 6, 409-423.

BONNEY, M.E. (1944) "Relationship between social status, family size, socioeconomic home background, and intelligence among school children in grades 3 to five". Sociometry, 7, 26-39.

BORG, W.R. and GALL, M.D. (1979) Educational Research (Third Edition). Longman, New York and London.

BORSTEIN, B. (1949) "The analysis of a phobic child. Some problems of theory and technique in child analysis". The Psychoanalytic Study of the Child. Vol 3/4. New York, International University Press.

BOSTON, M.V. (1939) "Some factors related to the expression of fear in a group of average and superior children". Smith College Studies in Social Work, 10, 106-107.

BOWER, E. (1969) "The emotionally handicapped child in the school". In Harsham H.W. (Ed) Educating the Emotionally Disturbed. Thomas Crowell Co. New York.

BOWLBY, J. (1973) "Attachment and Loss Vol 11: Separation Anxiety and Anger". Basic Books, New York.

BROADWIN, I.T. (1932) "A contribution to the study of Truancy". American J. of Orthopsychiatry, 2, 253-259.

BROOKS, E.E., BURI, J., BYRNE, E.A and HUDSON, M.C. (1962) "Socioeconomic factors, parental attitudes and school attendance". Social Work, 7, 4, 103-108.

BROWN, K. (1963) "The probation officers role in relation to school refusal". British J. Psychiatric Social Work, 7, 84-87.

BURT, C. (1920) In "Truancy", Tyerman, M.J. (1968) University of London Press Ltd.,

BUTTON, E. (1983) "Personal Construct Theory and Psychological Well Being". British J. Medical Psychology, 56, 313-321.

CAPLAN, G. (1964) "Principles of Preventive Psychiatry". New York. Basic Books.

CAMPBELL, J.D. (1955) "Manic depressive disease in children". J. of American Medical Association, 158, 154.

CARROLL, H.C.M. (1977) "The problem of absenteeism: research studies past and present". In Carroll, H.C.M (Ed) Absenteeism in South Wales. Faculty of Education, University College Swansea.

CASTANEDA, A., McCANDLESS, B.R. and PALERMO, D.S. (1956a) "The children's form of the Manifest Anxiety Scale". Child Development, 27, 317-326.

CASTANEDA, A., McCANDLESS, B.R. and PALERMO, D.S. (1956b) "Complex learning and performance as a function of anxiety in children and task difficulty". Child Development, 27, 327-332.

CATTELL, R.B. (1966) "Anxiety and Motivation: Theory and Crucial Experiments". In Spielberger, C.D. (Ed) Anxiety and Behaviour. Academic Press: New York and London.

CATTELL. R.B., and SCHEIER, I.H. (1961) "The meaning and measurement of Neuroticism and Anxiety". The Ronald Press Company. New York.

CHAPMAN, J.W., SILVA, P.A. and WILLIAMS, Sheila M (1984) "Academic self-concept: Some developmental and emotional correlates in 9 year old children". British J. Educational Psychology, 54, 284-292.

CHASSIN, L. (1983) "Age differences in childrens attributions for deviant behaviours". Psychiatry 46(2) 181-185.

CHAZAN, M. (1962) "School Phobia ". British J. Educational Psychology vol 32, 209-217.

CHIU, L.H. (1967) "A factorial study of academic motivation". Unpublished doctoral dissertation. Teachers College, Columbia University.

CHURCH, M. (1966) "First day fear: the child who is afraid to go to school". School and Community, 52, p24.

CLYNE, M.B. (1966) "Absent: School Refusal as an expression of disturbed family relationships". Tavistock Publications. London.

COATES, T.J. and THORESEN, C.E. (1981) "Sleep disturbance in children and adolescents". In Mash, E.J. and Terdal, L.G. (Eds) Behavioural Assessment of Childhood Disorders. John Wiley and Sons. New York.

COLL, P.G. and BLAND, R. (1979) "Manic-depressive illness in adolescence and childhood". Canadian Psychiatric Association Journal, 24, 225-263.

COMITI, F. (1976) "La manifestation scolaire". Soins, 23-29.

CONCERN (1985) "Children Count". National Childrens Bureau.

CONE, J.D. (1978) "The Behavioural Assessment Grid (BAG): A Conceptual Framework and Taxonomy". Behaviour Therapy, 9, 882-888.

COOLIDGE, J.C., BRODIE, R.D., and FEENEY, B. (1964) "A ten year follow up of sixty-five school phobic children". American J. of Orthopsychiatry, 34, 675-684.

COOLIDGE, J.C. HAHN, Pauline., and PECK, Alice (1957) "School Phobia: Neurotic Crisis or Way of Life". American J. of Orthopsychiatry 27, 296-306.

COOLIDGE, J.C. MILLER, Mary Lou, TESSMAN, Ellen and WALDFOGEL S. (1960) "School Phobia in Adolescence: A manifestation of severe character disturbance". American J. of Orthopsychiatry, 30, 599-607.

COOPER, M.G. (1966a) "School Refusal: An inquiry into the part played by school and home". Educational Research, 3, 223-229.

COOPER, M.G. (1966 b) "School Refusal". Educational Research, 8, 115-127.

COOPERSMITH, S. (1967) "The Antecedents of Self-Esteem". Freeman: San Francisco.

CROAKE, J.W..,and KNOX, F.H. (1971) "A second look at adolescent fears". Adolescence, 6, 279-284.

COURT, J.H. and KENNEDY, R.J. (1976) "Sex as a variable in Raven's Standard Progressive Matrices". Proceedings of the 21st International Congress of Psychology - Paris.

CROFT, I.J. and GRYGIER, T.G. (1956) "Social Relationships of Truants and Juvenile Delinquents". Human Relations, 9, No.4, 439-466.

CROGHAN, L.M. (1981) "Conceptualizing the critical elements in a rapid desensitization to school anxiety: A case study". Journal of Paediatric Psychology, Vol 6(2), 165-170.

DAVIDSON, S. (1960) "School Phobia as a Manifestation of Family Disturbance: Its Structure and Treatment". Journal of Child Psychology and Psychiatry, 1, 270-287

DAYTON, N.A. (1928) "Mental deficiency and other factors that influence school attendance". Mental Hygiene, 12, 794-800.

D.E.S. (1974) "Results of the School Attendance Survey". Press Notice, Department of Education and Science.

DIXON, J.J. De MONCHAUX, C., and SANDLER, J. (1957) "Patterns of Anxiety: the Phobias". British J. of Medical Psychology, 30, 34-40.

DOMBROSE, L.A. (1955) "Do Teachers Cause Neurotic Conflict in Children". Mental Hygiene, 39, 99-110.

DUNN, J.A. (1968) "The approach-avoidance paradigm as a model for the analyses of school anxiety". Journal of Educational Psychology, 59, 388-394.

DYER, H.S. (1968) "School Factors and Equal Educational Opportunity". Harvard Educational Review, 38, 38-56.

EATON, M.J. (1979) "A study of some factors associated with the early identification of persistent absenteeism". Educational Review, 31, no 3, 233-242.

EATON, M.J. and HOUGHTON, D.D. (1974) "The attitudes of persistent teenage absentees and regular attenders towards school and home". Irish Journal of Psychology 3, 159-175.

EDELBROCK, C., COSTELLO, A.J. DULCAN, M.K., CONOVER, N.C., and KALAS, R. (1986) "Parent-child agreement on child psychiatric symptoms assessed via structured interview". Journal of Child Psychology and Psychiatry 27, 181-190.

EISENBERG, L. (1958a) "School Phobia: Diagnosis, genesis and clinical management". Pediatric Clinics of North America, 5, 645-666.

EISENBERG, L. (1958b) "School Phobia: A study in the communication of anxiety". American J. Psychiatry, 114, 712-718.

EISENBERG, L. (1959) "The Pediatric management of school phobia". Journal Pediatrics, 55, 758-766.

ELLERMAN, D. (1980) "Self-regard of primary school children: Some Australian data". British J. Educational Psychology, 50, 114-122.

ENGLISH, O.S. and PEARSON, G.H.J. (1945) "Emotional Problems of Living". New York: Norton.

ENTWISTLE, N.J., and CUNNINGHAM, S. (1968) "Neuroticism and school attainment - a linear relationship". British J. Educational Psychology, 39, 109-130.

ERICKSON, E.H. (1950) "Childhood and Society" New York: Norton.

ESTES, H.R., HAYLETT, C.H., and JOHNSON, Adelaide M. (1956) "Separation Anxiety". American J. Psychotherapy, 10, 682-695.

EVANS, K.M. (1964) "Sociometry in schools 1: Sociometric Techniques". Educational Research, 6(1), 50-58.

EYSENCK, H.J. (1967) "The Biological Basis of Personality". Springfield, Thomas.

EYSENCK, H.J. and COOKSON, D. (1969) "Personality in Primary School Children". British J. Educational Psychology, 39, 109-130.

EYSENCK, H.J. and RACHMAN, S.J. (1965) "The Application of Learning Theory to child psychiatry". In Howells, J.G. (Ed) Modern Perspectives in Child Psychiatry. Oliver and Boyd. Edinburgh.

FOGELMAN, K., TIBBENHAM, A., and LAMBERT, L. (1980) "Absence from school: Findings from the National Child Development Study". In Hersov,L and Berg, I. (Eds) Out of School: Modern Perspectives in Truancy and School Refusal. John Wiley and Sons. Chichester.

FOGELMAN, K., and RICHARDSON, K. (1974) "School attendance: some results from the National Child Development study". In Turner, B. (Ed) Truancy. Ward Lock Educational. London.

FRANK, G. (1965). "The role of the family in the development of psychopathology". Psychological Bulletin, 64, 191-205.

FREUD, S. (1949) "Inhibitions, symptoms and anxiety". London Hogarth Press.

FRICK, W.B. (1964) "School phobia: a critical review of the literature". Merrill Palmer Quarterly, 9, 361-373.

FROMMER, E. (1967) "Treatment of Childhood Depression with anti-depressant drugs. British Medical Journal, 1, 729-732.

FUKUIA, E. (1978) "The classification of school-refusal" Kyushu Neuro-Psychiatry, 24(1) 71-78.

GALLOWAY, D.M. (1976) "Size of school, socio-economic hardship, suspension rates and persistent unjustified absence from school". British J. Educational Psychology, 46, 40-47.

GALLOWAY, D.M. (1980) "A study of persistent absence from school in Sheffield: Prevalence and Associated Educational, Psychological and Social Factors". Unpublished Ph.D Thesis. Sheffield City Polytechnic.

GALLOWAY, D.M., BALL, T., and SLYD, R. (1981) "The selection of parents and children for legal action in connection with unauthorized absence from school". British J. Social Work, 11, 445-461.

GARVEY, W.P., and HEGRENES, J.R. (1966) "Desinsitization techniques in the treatment of school phobia" American J. of Orthopsychiatry, 36, 147-152.

GITTELMAN-KLEIN, R., and KLEIN, D. (1980) "Separation Anxiety in school refusal and its treatment with Drugs". In Hersov, L., and Berg, I. (Eds) Out of School: Modern Perspectives in Truancy and School Refusal. John Wiley and Sons Ltd. Chichester.

GLASER, J. (1959) "Problems in school attendance: school phobia and related problems". Paediatrics, 23, 371-383.

GOLDBERG, T.B. (1953) "Factors in the development of school phobia". Smith College Studies in Social Work, 23, 172-227.

GOLDENBERG, H., and GOLDENBERG, I. (1970) "School phobia: childhood neurosis or learned maladaptive behaviour". Exceptional Children, 37, 3, 220-226.

GORDON, D.A., and YOUNG, R.D. (1976) "School Phobia; A Discussion of Aetiology, Treatment and Evaluation". Psychological Reports, 39, 783-804.

GREEN, M., and SOLNIT, A.J. (1964) "Reactions to the threatened loss of a child: A vulnerable child syndrome". In Hersov, L., and Berg, I. (Eds) Out of School: Modern Perspectives in Truancy and School Refusal. John Wiley and Sons (1980) Chichester.

HALEY, J. (1971) "Changing Families: A family therapy Reader". Grune and Stratton. New York.

HAMPE, E., MILLER, L., BARRETT, C., and NOBLE, H. (1973) "Intelligence and School Phobia". Journal of School Psychology, 11, 66-70.

HANSARD (1974) Parliamentary Debates. House of Commons Official Report. 5th series. Vol 877, London, H.M.S.O.

HANVIK, L.J. (1961) "The Child who is afraid of school". Elementary School Journal, 62, 27-33.

HARTUP, W.W. (1975) "The Origins of Friendships" In Lewis, M., and Rosenbaum, L.A. (Eds) Friendship and Peer Relations. New York. John Wiley.

HEATH, A.C. (1983) "The Self-Concept of School Refusers". Unpublished Ph.D. Thesis. Institute of Psychiatry. Univeristy of London.

HERSOV, L.A. (1960a) "Persistent non-attendance at school". J. Child Psychology and Psychiatry. 1 (2), 130-136.

HERSOV, L.A. (1960b) "Refusal to go to school". J. Child Psychology and Psychiatry, 1(2), 137-145.

HERSOV, L.A. (1977) "School Refusal". In Rutter, M., and Hersov, L.A. (Eds) Child Psychiatry: Modern Approaches. Oxford. Blackwells.

HERSOV, L.A. (1979) "Separation Anxiety at entry to school and later school refusal". Paper presented at the European Union of Paedopsychiatrists Congress, Madrid. Spain.

HITCHCOCK, A.B. (1956) "Symbolic and actual Flight from School". Smith College Studies in Social Work. 28, (1).

HOROWITZ, F.D. (1962) "The relationship of anxiety, self concept and sociometric status among fourth, fifth and sixth grade children". J. Abnormal and Social Psychology, 65, 212-214.

HUGHES, M., PINKERTON, G., and PLEWIS, I. (1979) "Children's Difficulties on starting Infant School". J. Child Psychology and Psychiatry, 20, 187-196.

HUSSERL, E.G. (1964) "The Idea of Phenomenology". Translated by Alston, W.P. and Nakhikion, G. The Hague. Martinus Nijhoff 1964.

ILLICH, I. (1971) "Deschooling Society". London. Penguin Books.

INHELDER, B., and PIAGET, J. (1958) "The growth of logical thinking". Translated by Parsons, A., and Milgram, S. Basic Books, Inc. New York.

I.S.T.D. (1974) "Truancy in Glasgow", British J. of Criminology, 14, 243-255.

IZARD, C.E. (1959) "Personality correlates of sociometric status". J. Applied Psychology, 43, 89-93.

JASPERS, K. (1919) "The Psychology of world Views' In A Hundred Years of Philosophy" by John Passmore. Pelican 1966.

JACKSON, L. (1964) "Anxiety in Adolescents in relation to school refusal". J. Child Psychology and Psychiatry, 5, 59-73.

JACOBSON, G.F. (1980) "Crisis Theory", In Jacobson, G.F. (Ed) Crisis Intervention in the 1980's: New Directions for Mental Health Services No. 6.

JARVIS, V. (1964) "Counter Transference in management of School Phobia". Psychoanalytic Quarterly, 33(3), 411-419.

JERSILD, A.T. (1954) "Emotional Development" In Carmichael,L. Manual of Child Psychology. New York. Wiley.

JERSILD, A.T., GOLDMAN, B., and LOFTUS, J.J. (1941) "A comparative study of the worries of children in two school situations". J. Experimental Education, 9, 232-326.

JERSILD, A.T., MARKEY, F.V., abd JERSILD, C.L. (1933) "Childrens fears, dreams, wishes, daydreams, likes, pleasant and unpleasant memories". Child Development Monograph, 12. New York. Columbia University Press.

JOHNSON, A.M., FALSTEIN, E.I. SZUREK, S.A. and SVENDSEN, M. (1941) "School Phobia". American J. of Orthopsychiatry 11,702-708.

JONES, H.G. (1960) "Learning and Abnormal behaviour". In Eysenck, H.J. (Ed) Handbook of Abnormal Psychology. London: Pitman.

JUNG, C.G. (1911) "A case of neurosis in a child". In The Collected Works of C.G. Jung. New York. Bollingen Foundation 1961.

KAHN, J.H., and NURSTEN, J.P. (1964) "Unwillingly to School" Pergamon Press.

KAVANAGH, A., and CARROLL, H.M.C. (1977) "Pupil attendance in three comprehensive schools: a study of the pupils and their families". In Carroll, H.M.C. (Ed) Absenteeism in South Wales: Studies of Pupils, their homes and their secondary schools. University College of Swansea: Faculty of Education.

KELLY, E.W. (1973) "School Phobia: a review of theory and treatment". Psychology in the Schools, 10, 33-42.

KELLY, G.A. (1966) "A brief introduction to personal construct theory". In Bannister, D. (Ed) Perspectives in Personal Construct Theory. Academic Press. London.

KELLEY, H.H., and MICHELA, J.L. (1980) "Attribution Theory and Research". Annual Review of Psychology, 31, 457-501.

KENNEDY, W.A. (1965) "School Phobia: Rapid treatment of 50 cases". J. Abnormal Psychology, 70, 285-289.

KENNEDY, W.A. (1971) "A behaviouristic community-oriented approach to school phobia and other disorders". In Richard, H.C. (Ed) Behavioural Intervention in Human Problems. Oxford. Pergamon Press.

KENT, N., and DAVIS, D.R. (1957) "Discipline in the home and intellectual development". British J. Medical Psychology, 20, 27-33.

KESSLER, J. W. (1966) "Psychopathology of Childhood". Englewood Cliffs, New Jersey. Prentice Hall.

KLECKA, W.R. (1980) "Discriminant Analysis". Quantitative Applications in the Social Sciences. University paper No.19. Sage Publications. Beverley Hills.

KLEIN, E. (1945) "The reluctance to go to school: Psychanalytic study of the child". International Universities Press Inc. New York. Vol.1.

KLEIN, M. (1924) "The role of the school in the libidinal development of the Child". International Journal of Psychoanalysis, 5, 312-331.

KLINE, L.W. (1898) "The migratory impulse vs Love of home". American Journal of Psychology, Vol X, No.1. 1-81.

KONDAS, O. (1967) "Reduction of Examination Anxiety and 'stage fright' by group desensitization and relaxation". Behaviour Research and Therapy, 5, 275-281.

KOZEKI, B., and ENTWISTLE, N.J. (1984) "Identifying Dimensions of School Motivation In Britain and Hungary". British J. of Educational Psychology, 54, 306-319.

KRAKOWSKI, A.J., and SANTORA, D.A. (1962) "Child Psychiatry and the General Practioner". Springfield Ill., Thomas.

KULKA, R.A., KLINGEL, D.M., and MANN, D.W. (1980) "School Crime and Disruption as a function of student-school fit: an empirical assessment". Journal of Youth and Adolescence, 9(4), 353-370.

LANG, T. (1975) "I am absent, you play truant, he/she is a phobic". The Times Educational supplement, Feb., 28th. 3118.

LANGFORD, W. (1937) "Anxiety Attacks in Children". American J. of Orthopsychiatry, 7, 210-219.

LAPOSE, R., and MONK, M.A. (1959) "Fears and worries in a representative sample of children". American J. of Orthopsychiatry, 29, 803-818.

LASSERS, E., NORDAN, R., and BLADHOLM, S. (1973) "Steps in the return to school of children with school phobia". American J. of Psychiatry, 130, 30, 265-268.

LAZARUS, A.A., DAVISON, A.G., and POLEFKA, D.A. (1965) "Classical and Operant factors in the treatment of school phobia". J. of Abnormal Psychology, 70, 225-229.

LEACH, G.M. (1972) "A comparason of the social behaviour of some normal and problem children". In Jones, N.B (Ed) Ethological Studies of Child Behaviour. Cambridge University Press.

LETON, D.A. (1962) "Assessment of school phobia". Mental Hygiene, 46, 256-264.

LEVENTHAL, T., and SILLS, M. (1964) "Self Image in School Pnobia". American J. of Orthopyschiatry, 34, 685-695.

LIEBERT, R.M., and MORRIS, L.W. (1967) "Cognitive and emotional components of test anxiety: a distinction and some initial data". Psychological Reports, 20, 975-978.

LONG, J.D. (1975) "School Phobia and the Elementary Counselor". Elementary School Guidance and Counselling, 5, 289-294.

LUCHINI, N. (1978) "Preschooler phobia: Effects of systematic desensitization combined with modeling". Aprendizaje y Comportamiento, 1(1), 87-100.

MACCOBY, E.E., and JACKLIN, C.N. (1974) "The Psychology of Sex Differences". Stamford University Press. California.

MACCOBY, E.E. and JACKLIN, C.N. (1980) "Psychological Sex Differences". In Rutter, M. (Ed) Developmental Psychiatry. Heineman Medical Books.

MACFARLANE, J.W., ALLEN,L., and HONZIK, M. (1954) "A developmental study of the behaviour problems of normal children". University of California Press: Berkley.

MACMILLAN, A., WALKER, L., GARSIDE, R.F., KOLVIN, I., LEITCH, I., and NICOL, A.R. (1978) "The development and application of sociometric techniques for the identification of isolated and rejected children". J. Association of Workers for Maladjusted Children", 6, 58-67.

MAJUMDAR, S.K. (1975), "A case study of pedagophobia: Psychotherapeutic approaches to behaviour modification". Indian J. Clinical Psychology, 2(1), 91-93.

MALMQUIST, C.P. (1965) "School Phobia: A problem in family neurosis". J. of the American Academy of Child Psychiatry, 4, 293-319.

MANDLER, G., and SARASON, S.B. (1952) "A study of anxiety and learning". J. Abnormal social Psychology, 47, 166-173.

MARKLUND, S. (1973) "The School fatigued pupils". In Turner, B. (Ed) Truancy.

MARKS, I.M. (1969) "Fears and Phobias". London Heinemann.

MARKS, I. (1971) "Phobic Disorders Four Years After Treatment: A Prospective Follow up".

MARKUS, H., (1980) "The self in thought and memory". In Wegner, D.M. and Vallacher, R.R. (Eds) The Self in Social Psychology. New York: Oxford.

MATTEJAT, F. (1981) "Schulphobie: Klinik und Therapie". Praxis der Kinderpsychologie und Kinderpsychiatric, 30(8), 292-298.

MAURER, A. (1965) "What Children Fear". J. Genetic Psychology, 106, 265-277.

MAWBY, R.I. (1977) "Truancy: Data from a self report survey". Durham Educational Review (XXX1X), 21-34.

MAY, D. (1975) "Truancy, school absenteeism and delinquency". Scottish Educational Studies, 7, 97-107.

MAY, R. (1950) "The Meaning of Anxiety". New York. Ronald Press.

McARTHUR, A. (1961) In Weiner, B. (Ed) "Psychological Disturbance in Adolesence". Wiley Interscience, New York.

McCONACHIE, J.W. (1955) "Health of the School Child". London H.M.S.O.

McDILL, E.L., and RIGSBY, L.C. (1973) "Structure and Progress in Secondary Schools". Baltimore: Johns Hopkins University Press.

McGUIRE, W.J., McGUIRE, C.V., and CHEEVER, J. (1986) "The Self in Society: Effects of Social Contexts on the sense of self". British J. Social Psychology, 25, 259-270.

MEADOW, R. (1977) "Munchausen syndrome by proxy. The hinterland of child abuse". In Hersov, L. and Berg, I. (Eds) Out of School. John Wiley and Sons.

MEASOR, L., and WOODS, P. (1984) "Changing schools: pupil perspectives on transfer to a comprehensive". Open University Press: Milton Keynes.

MESSER, A.A. (1964) "Treatment of the child in emotional conflict". New York: McGraw Hill.

MILLER, L.C., BARRETT, C.L., and HAMPE, E., (1974) "Phobias of childhood in a pre-scientific era". In Davies, A. (Ed) Child Personality and Psychopathology: Current Topics". John Wiley: New York.

MILLER, L.C., BARRETT, C.L., HAMPE, E., and NOBLE, H. (1972) "Factor structure of childhood fears". J. Consulting and Clinical Psychology. 39, 264-268.

MILMAN, D.H. (1961) "School Phobia in older children and adolescents: Diagnostic implications and prognosis". Pediatrics, 28, 462-471.

MINUCHIN, P., BIBER, E.S., and ZIMILES, H. (1969) "The Psychological impact of school experience". Basic Books. New York.

MINUCHIN, S. (1970) "The use of an ecological framework in the treatment of a child". In Anthony, E.J. and Koupernick, C. (eds) The Child and His Family. Wiley Interscience. New York.

MITCHELL, S., and SHEPHERD, M., "The child who dislikes going to school". British J. Educational Psychology, 37, 32-40.

MODEL, A., and SHEPHEARD, E. (1958) "The Child who refuses to go to school". Medical Officer, 100, 39.

MONSOUR, K. (1961) "School Phobia in Teachers". American J. of Orthopsychiatry, 31, 347-354.

MOORE, T. "Difficulties of the ordinary child in adjusting to primary school". J. Child Psychology and Psychiatry, 7, 17-33.

MORGAN, G.A.V. (1959) "Children who refuse to go to school: observations on 'school anxiety'". Medical Officer, 102, 221.

MORRIS, L.W., FINKELSTEIN, C.S., and FISHER, W.R. (1976) "Components of school anxiety: Developmental Trends and Sex differences". J. Genetic Psychology, 128, 49-57.

MORRIS, R.J., and KRATOCHWILL, T.R. (1983) "Treating Childrens Fears and Phobias: A behavioural Approach". Pergamon Press.

MORRISON, D.E., and HENKEL, R.E. (1970) "The Significance Test Controversy: A Reader". Aldine publishing. Chicago.

MOSER, C.A., and KALTON, G. (1975) "Survey methods in social Investigation". Heinemann Educational Books. London.

MUSGROVE, F. (1966) "The social needs and satisfactions of some younjg people at home, in youth clubs and at work - part 1". British J. Educational Psychology, 36, 61-71.

N.A.C.E.W.O (1974) "These we serve: The report of a working party set up to enquire into the causes of absence from school". National Association of Chief Education Welfare Officers. Bedford.

NICOLS, K.A. and BERG, I. (1970) "School Phobia and self evaluation". J. Child Psychology and Psychiatry, 11, 133-141.

NIE, N.H., HULL, C., JENKINS, J.G., STEINBRENNER, K., and BENT, D.H. (1975) "Statistical Package for the Social Sciences". McGraw Hill. New York.

NISBET, J.D., and ENTWISTLE, N.J. (1969) "The transition to secondary education". London. University of London Press.

NORTHWAY, M.L. (1946) "Personality and sociometric status: a review of the Toronto Studies". Sociometry, IX, 233-241.

NOTTELMAN, E., and HILL, K. (1977) "Test anxiety and off task behaviour in evaluative situations". Child Development, 48, 225-231.

NUNALLY, J.C. (1967) "Psychometric Theory". McGraw Hill. New York.

NURSTEN, J.P. (1958) "The background of children with school phobia". Medical Officer, 100, 340-342.

ODIER, C. (1956) "Anxiety and Magic Thinking". New York: International University Press.

O.P.C.S. (1981) "Census 1981: National Report. H.M.S.O. London.

OJANEN, S. (1980) "Fear of school originating from phobic dynamics". Psychiatric Fennica 81-89.

OKAZAKI, T. (1980) "An epidemiological approach to school refusal in Shimane Prefecture". Japanese J. of Child and Adolescent Psychiatry, 21(5) 333-342.

OPPENHEIM, A.N. (1966) "Questionnaire Design and Measurement" Heinemann: London.

PALLISTER, R. (1967) "The determinants of elementary school attendance about 1850". Durham Educational Review, 5, 384-398.

PARTRIDGE, J.M. (1939) "Truancy". Journal of Mental Science, 85, 45-81.

PATTERSON, G.R. (1965) "A learning theory approach to the study of school phobia". In Ulman, L.P. and Krasner, L. (Eds) Case Studies in Behaviour Modification. New York, Holt.

PEARCE, J.B. (1977) "Depressive Disorder in Childhood". J. Child Psychology and Psychiatry, 18, 79-82.

PEARCE, J.B. (1978) "The recognition of depressive disorder in children". J. Royal Society of Medicine, 71, 496.

PINTER,R., and LEV, J. (1940) "Worries of School Children". J. Genetic Psychology, 56, 67-76.

PITTMAN, F.S., LANGSLEY, D.G. and DeYOUNG, C.D. (1968) "Work and School Phobias". American J. of Psychiatry, 124, 93-99.

PLOWDEN REPORT (1967) "Children and their Primary Schools". London, H.M.S.O.

PRITCHARD, C. (1974) "The E.W.O, Truancy and School Phobia". Social Work Today, 5, 130-134.

QUAY, H. (1979) "Classification". In Quay, H.C., and Werry, J.S. (Eds) Psychopathological Disorders of Childhood. New York: Wiley.

RACHMAN, S., and COSTELLO, C.G. (1961) "The etiology and treatment of childrens phobias: a Review". American J. of Psychiatry, 118, 97-105.

RACHMAN, S.J. (1978) "Fear and Courage". W.H. Freeman and Co. San Francisco.

RADIN, S.S. (1967) "Psychodynamic aspects of school phobia". Comprehensive Psychiatry, 8, 119-128.

RAVEN, J.C. (1938) "Progressive Matrices: A perceptual Test of Intelligence". London: H.K. Lewis.

RAVEN, J.C. (1960) "Guide to the Standard Progressive Matrices". London: H.K. Lewis.

RAVEN, J.C. (1975) "School rejection and its amelioration". Educational Research, 20(1), 3-9.

REGAN, G. (1967) "Personality Characteristics and attitude to school". British J. Educational Psychology, 37(1) 127-129.

REGISTRAR GENERALS OFFICE (1966) "Classification of Occupations". London: H.M.S.O.

REID, K.C. (1980) "Some social, psychological and institutional factors related to school absenteeism". Unpublished Ph.D. Thesis. University of Wales.

REID, K.C. (1982) "The Self-Concept and Persistent School Absenteeism". British J. of Educational Psychology, 52, 179-187.

REYNOLDS, D., JONES,D., ST. LEGER, S., and MURGATROYD, S. (1980) "School Factors and Truancy". In Hersov, L., and Berg, I. (Eds)Out of School: Modern Perspectives in Truancy and School Refusal. John Wiley and Sons, New York.

RHINE, W.R. and SPENCER, L.M. (1975) "Effects of follow through on school fearfulness among black children". Journal of Negro Education, 44, 446-453.

RODRIGUEZ, A., RODRIGUEZ, M., and EISENBERG, L. (1959) "The outcome of school phobia: a follow up study based on 41 cases". American J. of Psychiatry, 116, 540-544.

ROGERS, C.R. (1959) "A theory of Therapy, Personality and Interpersonal Relationships as Developed in the Client Centered Framework". In Koc, S (Ed) Psychology: A Study of a Science (Vol 3). McGraw Hill Books.

ROSE, J.I. (1966) "A sociometric comparison of well behaved and badly behaved classes". British J. Educational Psychology, 36, 331.

ROSENBURG, M. (1979) "Conceiving the Self". New York: Basic Books.

ROSENBURG, M. (1965) "Society and the Adolescent Self-Image". Princeton University Press: Princeton. N.J.

ROSS, A.O. (1972) "Behaviour Therapy". In Wolman,B.B. (Ed) Manual of Child Psychopathology. New York: McGraw Hill.

ROSS. A.O. (1980) "Psychological Disorders of Children: A behaviour approach to theory, research and therapy". New Your: McGraw Hill.

RUTTER, M. (1966) "Children of Sick Parents" Oxford University Press: Oxford.

RUTTER, M. (1967) "A children's behaviour questionnaire for Completion by teachers: Preliminary findings". J. Child Psychology and Psychiatry, 8, 1-11.

RUTTER, M., MAUGHAN, B., MORTIMER, P., and OUSTON, J. (1979) "Fifteen Thousand Hours". London: Open Books.

RUTTER, M., TIZARD, J., and WHITMORE, K (Eds)(1970) "Education Health and Behaviour". London: Longman.

RYLE, A. (1963) "Psychotherapy by the non-psychiatrist". Proceedings of the Royal Society of Medicine, 56, 834.

SANGSTER, D. (1971) "School Phobia: The going to school sickness". J. of the Inernational Association of Pupil Personnel Workers, 15, 93-100.

SARASON, S.B., DAVIDSON, K.S., LIGHTHALL, F.F., WAITE, R.R., and RUEBUSH, B.K. (1960) "Anxiety in Elementary School Children". John wiley and Sons. New York.

SCHELER, M. (1916) "Formalism in ethics and the material ethics of values". In Pivecvic, E. Husserl and Phenomenology. (1970) Hutchinson and Co.

SCHRANK, F.A. (1979) "Mild School Phobia". Elementary School Guidance and Counseling, 14, 66-72.

SCHWARZWALD, J., LOAR,T., and HOFFMAN, M. (1986) "The impact of sociometric method and activity content on assessment of intergroup relations in the classroom". British J. Educational Psychology, 56(1), 24-31.

SELIGMAN, M.E.P. (1975) "Helplessness: On depression, development and death". Freeman. San Francisco.

SHAPIRO, T., and JEGEDJ, R.C. (1973) "School Phobia: a babel of tongues". Journal of Autism and Childhood Schizophrenia, 3, 163-186.

SHAW, W.H. (1954) "A study of popular and unpopular children". Educational Review, 6, 208-220.

SHEPHERD, M., OPPENHEIM, B., and MITCHELL, S. (1971) "Childhood behaviour and mental health". University of London Press.

SHEPHERD, M., COOPER, B., BROWN, A., and KALTON, A.A. (1966) "Psychiatric illness and general practice". Oxford: Oxford University Press.

SMITH, S.L. (1970) "School Refusal with Anxiety: A review of 63 Cases". Canadian Psychiatric Association Journal, 15, 257-264.

SNEED, R.C., and BELL, R.F. (1976) "The Dauphin of Munchausen: factitious passage fo renal stones in a child". In Hersov, L. and Berg, I. (Eds) Our of School (1980). John Wiley and Sons.

SNYGG, D., and COMBS, A.W. (1949) "Individual behaviour: A new frame of reference for psychology". New York: Harper.

SPERLING, M. (1961) "Analytic first aid in school phobia". Psychoanalytic Quarterly, 30, 504-518.

SPERLING, M. (1967) "School Phobias: Classification, Dynamics and Treatment". The Psychoanalytic Study of the Child. Vol.XX11, 375-401. Hogarth Press.

SPIELBERGER, C.D. (1966) "Anxiety and Behaviour". Academic Press: New York.

STOTT, D.H. (1971) "The Bristol Social Adjustment Guides". London: University of London Press.

STRANGER, M. (1980) "Crisis Intervention: An Overview". In Davanloo, H. (Ed) Short Term Dynamic Psychotherapy. New York: Jason Aronson.

STRINGER, L.A. (1973) "The child you never notice - but must". Teacher, 91, 6-9.

SULLIVAN, H.S. (1953) "The Interpersonal Theory of Psychiatry". New York: Norton.

TALBOT, M. (1957) "Panic in School Phobia". American J. of Orthopsychiatry, 27, 286-295.

TALBOT, M., and HENSON, I. (1954) "Pupils psychologically absent from school". American J. of Orthopsychiatry, 24, 381-390.

TENNENT, T.G. (1969) "School non-attendance and delinquency". Unpublished M.D. Thesis. University of Oxford. In Rutter M Hersov, L (Eds) Child Psychiatry:· Modern Approaches. Oxford, Blackwell.

TENNENT, T.G. (1971) "School non-attendance and delinquency". Educational Research. 13(3) 185-190.

THOMAS, C.B. (1976) "Precusors of premature diseases and death: the predictive potential of habits and family attitudes". Annals of Internal Medicine, 85, 613-658.

TIBBENHAM, A. (1977) "Housing and Truancy". New Society, 39, 501-502.

TORMA, S., and HALSTI, A. (1975) "Factors contributing to school phobia and truancy". Psychiatria Fennica, 209-220.

TSUJI, H. (1981) "Consciousness of self and others in adolescent school refusals". Japanese J. of Child and Adolescent Psychiatry, 12 (3) 182-192.

TURNER, R.H. (1953) "The quest for Universals in sociological research". American Sociological Review, 18, 604-611.

TYERMAN, M.J. (1968) "A research into truancy". British J. Educational Psychology, 28, 217-225.

TYMERMAN, M.J. (1968) "Truancy". University of London Press.

TYRER, P., and TYRER, S. (1974) "School refusal, truancy and adult neurotic illness". Psychological Medicine, 4, 416-421.

VAN DOREN, E. (1964) "School Phobia and Chronic Truancy: A Possible Relationship". Quincy 111: Craddock Boys School, Mimeographed.

VAN HOUTEN, J. (1948) "Twelve cases of school phobia: A study of the personality of the mother and the child as factors in the genesis of the problem". Smith College Studies in Social Work, 18, 161-180.

VERNON, M.D. (1969) "Human Motivation". Cambridge University Press.

VOILAND, A.J (1962) "Family Case Diagnosis" New York: Columbia University Press.

WADE, B.E. (1981a) "Highly Anxious Pupils in Formal and Informal Primary Classrooms; the Relationship between Inferred Coping strategies and : 1 - Cognitive Attainment". British J. Educational Psychology, 51(1), 59-49.

WADE, B.E. (1981b) "Highly Anxious Pupils in Formal and Informal Primary Classrooms; the Relationship between Inferred Coping Strategies and: 11 - Classroom Behaviour". British J. Educational Psychology, 51(1), 50-57.

WAKABAYASHI, S. (1982) "The relationship between school refusal and social conditions in Japan". Japanese J. of Child and Adolescent Psychiatry, 23(3), 160-180.

WALDFOGEL, S., COOLIDGE, J.C HAHI, P.B. (1956) "The development, meaning and management of School Phobia". American J. Orthopsychiatry, 27, 754-780.

WALDFOGEL, S., TESSMAN, E., and HAHH, P.B. (1959) "Early Intervention in School Phobia". American J. Orthopsychiatry, 29, 324-332.

WALDRON, S. (1976) "The significance of childhood neuroses for adult mental health: A follow up study". American J. Psychiatry, 133(5) 532-538.

WALDRON, S., SHRIER, D., STONE, B., and TOBIN, F. (1975) "School Phobia and other neuroses: A systematic study of the children and their familits". American J. Psychiatry, 132, 802-808.

WALLACE, H.M., SIFFERT, R.S., DEARER, G., and PINGITORE, E. (1955) "The Homebound Child". J. American Medical Association, 158, 158-160.

WALLER, D., and EISENBERG, L. (1980) "School Refusal in Childhood: A Psychiatric- Paediatric Perspective". In Hersov, L., and Berg, I. (Eds) Out of School, John Wiley and Sons Ltd.

WANT, J.H. (1983) "School based intervention strategies for school phobia: A ten step 'commonsense' approach". Pointer, 27(3) 27-32.

WARNECKE, R. (1964) "School Phobia and its Treatment". British J. Medical Psychology, 37, 71-79.

WARREN, W. (1948) "Acute Neurotic Breakdown in Children with Refusal to go to School". Archive of Diseases in Children, 23, 266-272.

WEINER, R. (1970) "Psychological Disturbance in Adolescence". Wiley Interscience, New York.

WEINER, B. (1979) "A Theory of motivation for some classroom experiences". J. Educational Psychology, 71, 3-25.

WEISS, M., and CAIN, B. (1964) "The Residential Treatment of Children and Adolescents with School Phobia". American J. Orthopsychiatry, 34, 103-114.

WERNER, E.E. (1985) "Stress and Protective Factors in Childrens' Lives". In Nicol, A. R. (Ed) Longitudinal Studies in Child Psychology and Psychiatry. John Wiley and Son Ltd.

WHITEHEAD, T. (1930) "Fears and Phobias". Sheldon Press: London.

WILLIAMS, P. (1974) "Collecting the Figures". In Turner, B. (Ed) Truancy. Ward Lock. London.

WINE, J. (1971) "Test Anxiety and Direction of Attention". Psychological Bulletin, 76, 92-104.

WINKER, J.B. (1949) "Age trends and sex differences in the wishes, identifications, activities and fears of children". Child Development, 20, 191-200.

YARROW, L.J. (1964) "Separation from parents during early childhood". In Hoffman, M.I. and Hoffman, L.W. (Eds) Review of Child Development Research. New York, Russell Sage Foundation.

YATES, A.J. (1970) "Behaviour Therapy". John Wiley and Sons, New York.

YOUNG, A.J. (1947) "Truancy. A study of mental, scholastic and social conditions in the problem of non attendance at school". British J. Educational Psychology, 17, 50-51.

YULE, W., HERSOV, L., and TRISELIOTIS, J. (1980) "Behavioural Treatments of School Phobia". In Hersov, L., and Berg, I. (Eds) Out of School. John Wiley and Sons.

YULE, W. (1979) "Behavioural Approaches to the Treatment and Prevention of School Phobia". Behavioural Analysis and Modification. Urban and Schwazenberg.

YULE, W. (1977) "Behavioural Approaches". In Rutter, M., and Hersov, L. (Eds) Child Psychiatry: Modern Approaches. Blackwell, Oxford.

ZELIGS, R. (1939) "Childrens Worries". Sociology and Social Research, 24, 22-32.

Appendices

APPENDIX 1

PUPIL QUESTIONNAIRE **Serial Number:**.....

Name of pupil.....**Age:**.....**Sex:**.....

Name of School:..... **Form:** .....

Below are some questions about how pupils feel about school and home. This is **NOT** a test. There are no right or wrong answers. Please read each question carefully and then underline the one you think is true of you. If you need any help just raise your hand. Please do not look at what anyone else is doing. I want to find out what YOU think.

NO ONE AT HOME OR IN SCHOOL WILL SEE YOUR ANSWERS

1. I am usually satisfied with my own behaviour in school
   strong agree agree not sure disagree strongly disagree
2. Sometimes I become very anxious at the thought of going to school but I don't know why
   strongly agree agree not sure disagree strongly disagree
3. My parents are usually satisfied with my behaviour at home
   strongly agree agree not sure disagree strongly disagree
4. I would go to a different school if I could
   strongly agree agree not sure disagree strongly disagree
5. In school I like it when we go on to some completely new kind of work
   strongly agree agree not sure disagree strongly disagree
6. I am usually satisfied with the standard of my own work in school
   strongly agree agree not sure disagree strongly disagree
7. I am sometimes teased at school
   strongly agree agree not sure disagree strongly disagree
8. My parents are usually satisfied with my school work
   strongly agree agree not sure disagree strongly disagree
9. Sometimes I fee afraid of my teacher
   strongly agree agree not sure disagree strongly disagree
10. My teachers are usually satisfied with my school work
    strongly agree agree not sure disagree strongly disagree
11. Sometimes I become worried or frightened without any special reason
    strongly agree agree not sure disagree strongly disagree
12. This class is too badly behaved for me to get any proper work done
    strongly agree agree not sure disagree strongly disagree
13. I like school
    strongly agree agree not sure disagree strongly disagree
14. Sometimes I feel I have no one I can really talk to
    strongly agree agree not sure disagree strongly disagree
15. I don't like changing for games or having showers in school
    strongly agree agree not sure disagree strongly disagree
16. I never find my school work too difficult
    strongly agree agree not sure disagree strongly disagree
17. My teachers are usually satisfied with my behaviour in school
    strongly agree agree not sure disagree strongly disagree
18. I am sometimes bullied in school
    strongly agree agree not sure disagree strongly disagree
19. Sometimes I worry that something could happen to my mum or dad while I'm in school
    strongly agree agree not sure disagree strongly disagree
20. I am usually happy at home
    strongly agree agree not sure disagree strongly disagree

APPENDIX 1 (Contd)

Now here are some questions of a slightly different sort. Again all you have to do is underline the one you think is true of you. There are no right or wrong answers and no one at home or in school will see which one you choose.

21. Usually I get on best with
My father | My mother | both the same | neither one | I have only one parent

22. I have a bedroom to myself
Yes | No

23. I have had some problems getting off to sleep during the past three months or so
not at all | occasionally | frequently

24. I wake up during the night
never | seldom | once a week | twice a week | nearly every night | every night

25. I have bad dreams which wake me in the night
never | about once a month | about once a week | more than once a week | nearly every night | every night

26. How do you spend most of your spare time (you may underline more than one if you like)
watching television | playing with friends | at a hobby or sport
aimlessly wandering around | listening to records or the radio | attending a club
other (please specify) .....

27. Do you feel that you make friends
very easily | fairly easily | find it difficult | never seem to bother | want to make friends but somehow cannot

28. Do your friends come from this school
most of them | one or two of them | none of them | I have no friends

29. Are your friends usually
about the same age as you | younger | older | a wide mix of ages

30. Most of my friends are: Boys | Girls | about equal numbers of boys and girls

31. Sometimes before going to school
I get a headache | I get a tummy ache | I tremble | I feel very frightened
my heart beats too fast | I feel I am going to be sick | I feel dizzy
other feelings (please specify) .....
I feel OK

32. How often does this happen
never | once or twice | a day nearly every month | a day nearly every week
nearly every day | every day

33. How serious is the problem of these feeling for you
very serious | serious | not sure | hardly a problem at all | I don't get these feelings

34. Have you ever stayed away from school by pretending to be sick
never | once or twice | a day nearly every month | a day nearly every week

35. When did you last stay away from school without your parents knowing
never | more than a year ago | months ago | last month | last week | this week

36. When you stayed away without your parents knowing were you
by yourself | with another boy or girl | with more than one other | have never stayed away

37. Do you ever feel frightened about any of the following (underline all the ones that are true of you)
insects | darkness | enclosed spaces | animals | going out | water | heights | open spaces
any other fears (please specify) ..... | I have no special fears

38. How serious is the problem of these special fears for you
very serious | serious | not sure | not serious | hardly a problem at all | I have no special fears

39. Did you move to this school from another one during this term: Yes | No

40. Do you prefer this school to your old one
I haven't moved | I prefer this one | I prefer the old one | I'm not sure

41. Did you move from another class to this one during this term: Yes | No

42. Do you prefer this class to your old one
I haven't moved | I prefer this one | I prefer the old one | I'm not sure

43. Do you get pocket money
never | sometimes | up to 50p a week | up to £1 a week | up to £2 a week | more than £2 a week

44. Do you have a part time job: Yes | No

45. Did you enjoy completing this questionnnaire
a little | a lot | not sure | didn't enjoy it much | didn't enjoy it at all

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

APPENDIX 2

Factor Analysis of Pupil Questionnaire Data: Key to list of variables included - BOYS.

V8: 'I am usually satisfied with my own behaviour in school.'
V9: 'Sometimes I become very anxious at the thought of going to school but I don't know why.'
V10: 'My parents are usually satisfied with my behaviour at home.'
V11: 'I would go to a different school if I could.'

V12: 'In school I like it when we go on to some completely new kind of work.'
V13: 'I am usually satisfied with the standard of my own work in school.'
V14: 'I am sometimes teased at school.'

V15: 'My parents are usually satisfied with my school work.'
V16: 'Sometimes I feel afraid of my teacher.'

V17: 'My teachers are usually satisfied with my school work.'
V18: 'Sometimes I become worried or frightened without any special reason.'
V19: 'This class is too badly behaved for me to get any proper work done.'
V20: 'I like school.'

V21: 'Sometimes I feel I have no one I can really talk to'.
V22: 'I don't like changing for games or having showers in school.'
V23: 'I never find my school work too difficult.'

V24: 'My teachers are usually satisfied with my behaviour in school.'
V25: 'I am someimes bullied in school.'

V26: 'Sometimes I worry that something could happen to my mum or dad while I'm in school.'
V27: 'I am usually happy at home.'

V30: 'I have had some problems getting off to sleep during the past three months or so.'
V31: 'I wake up during the night.'

V32: 'I have bad dreams which wake me in the night.'

V40: ' Do you make friends very easily/fairly easily/find it difficult/ never seem to bother.'
V53: 'How often do you have (unpleasant symptoms) in connection with going to school.
V55: 'Have you ever stayed away from school by pretending to be sick.'
V56: 'When did you stay away without your parents knowing'

V67: 'How serious are any special fears you have.'

APPENDIX 2 (contd.,)

FACTOR STRUCTURE AND WEIGHTINGS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
V8	0.41780	0.12964	-0.02685	-0.04542
V9	-0.11815	0.22300	0.11834	0.37430
V10	0.63305	-0.10928	0.15639	-0.00265
V11	0.31179	0.00356	-0.13339	0.45526
V12	-0.23209	0.03392	-0.13935	-0.05488
V13	0.46964	-0.03636	0.09503	-0.09235
V14	-0.13915	-0.09114	0.43433	0.18912
V15	0.67297	-0.14162	-0.04699	-0.00948
V16	-0.13494	-0.01954	0.30358	0.16182
V17	0.53844	0.13263	-0.04558	0.03103
V18	-0.06935	0.13945	0.47687	0.15246
V19	-0.00273	-0.04410	0.47966	-0.20489
V20	0.64048	0.08608	-0.14520	0.14710
V21	0.02622	0.18736	0.07271	0.49196
V22	-0.00400	-0.00464	0.37346	-0.00351
V23	0.28215	-0.05492	-0.07157	0.01025
V24	0.72767	-0.10162	0.02283	-0.07449
V25	-0.07542	0.19036	0.30938	0.23328
V26	0.04194	0.06813	0.56377	-0.07069
V27	0.46211	-0.08648	0.00717	0.27769
V30	0.05287	-0.20105	-0.21812	-0.11994
V31	-0.13805	-0.29478	-0.16941	0.06887
V32	-0.09711	-0.36995	-0.30774	0.40830
V40	0.04464	0.04967	0.17352	0.37147
V53	0.16732	-0.80112	0.06319	-0.15532
V54	0.19916	-0.76331	0.00579	-0.07449
V55	-0.20317	-0.21407	0.14023	0.01971
V56	-0.40923	-0.09187	0.21325	0.13456
V67	-0.19301	-0.05886	-0.33056	0.01225

APPENDIX 3

Factor Analysis of Pupil Questionnaire Data: Key to list of variables included - GIRLS.

V8: 'I am usually satisfied with my own behaviour in school.'
V9: 'Sometimes I become very anxious at the thought of going to school but I don't know why.'
V10: 'My parents are usually satisfied with my behaviour at home.'
V11: 'I would go to a different school if I could.'

V12: 'In school I like it when we go on to some completely new kind of work.'
V13: 'I am usually satisfied with the standard of my own work in school.'
V14: 'I am sometimes teased at school.'

V15: 'My parents are usually satisfied with my school work.'
V16: 'Sometimes I feel afraid of my teacher.'

V17: 'My teachers are usually satisfied with my school work.'
V18: 'Sometimes I become worried or frightened without any special reason.'
V19: 'This class is too badly behaved for me to get any proper work done.'
V20: 'I like school.'

V21: 'Sometimes I feel I have no one I can really talk to'.
V22: 'I don't like changing for games or having showers in school.'
V23: 'I never find my school work too difficult.'

V24: 'My teachers are usually satisfied with my behaviour in school.'
V25: 'I am someimes bullied in school.'

V26: 'Sometimes I worry that something could happen to my mum or dad while I'm in school.'
V27: 'I am usually happy at home.'

V30: 'I have had some problems getting off to sleep during the past three months or so.'
V31: 'I wake up during the night.'

V32: 'I have bad dreams which wake me in the night.'

V40: 'Do you make friends very easily/fairly easily/find it difficult/ never seem to bother.'
V53: 'How often do you have (unpleasant symptoms) in connection with going to school.'
V55: 'Have you ever stayed away from school by pretending to be sick.'
V56: 'When did you stay away without your parents knowing'

V67: 'How serious are any special fears you have.'

APPENDIX 3 (Contd.,)

FACTOR STRUCTURE AND WEIGHTINGS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
V8	0.01390	0.41564	0.15417	-0.06511
V9	0.31804	0.03276	0.09367	-0.17697
V10	0.01341	0.45883	0.14147	-0.08170
V11	0.18708	0.09007	0.03948	-0.20160
V12	-0.07906	0.19488	-0.10447	0.12912
V13	-0.06375	0.48313	0.09418	-0.18099
V14	0.07500	-0.09929	0.54036	0.08843
V15	-0.16543	0.67012	0.05461	0.01804
V16	0.07861	0.02236	0.26318	0.16070
V17	-0.00302	0.53399	-0.08209	-0.01368
V18	0.23201	-0.01103	0.42429	-0.09957
V19	-0.08424	-0.09874	0.57659	-0.01805
V20	0.21462	0.37514	-0.15088	-0.28155
V21	-0.02180	-0.02789	0.61362	-0.04232
V22	0.06938	0.05782	0.24244	-0.07512
V23	0.01116	0.19554	-0.06254	0.14773
V24	0.14329	0.58420	-0.17555	-0.07708
V25	0.24348	0.07266	0.46058	0.32439
V26	0.28180	0.01938	0.09286	0.13206
V27	-0.19588	0.31648	0.36667	-0.17415
V30	-0.22072	-0.08058	-0.16079	0.13113
V31	-0.20223	-0.17575	-0.18307	0.13447
V32	-0.21883	0.00259	-0.12123	0.08970
V40	0.24054	0.09081	0.15766	0.19082
V53	-0.79183	0.13455	0.09484	-0.04491
V54	-0.88078	0.18716	0.14563	-0.03324
V55	-0.04849	-0.14969	0.07397	0.62952
V56	0.06104	-0.08592	-0.01437	0.46033
V67	-0.35368	-0.08127	-0.13779	-0.00796

APPENDIX 4

CHILD PROGRESS STUDY

Dear Parent

Enclosed you will find a questionnaire which I would like you to complete and return to me. This questionnaire is part of a self-financed personal research study aimed at building a clearer picture of those factors which influence childrens' attendance and performance at school. It is hoped that by collecting this information on children who are normally developing we will in future be able to identify those who may be developing problems and to give them appropriate extra attention before the difficulties become too severe. This questionnaire is therefore designed to gather information on such normally developing boys and girls. There is no suggestion that there is a particular problem with your child.

This questionnaire is STRICTLY CONFIDENTIAL and will be destroyed as soon as the information has been collated. To ensure confidentiality an identifying serial number has been allocated so that you do not have to state your surname or your address. The contents of the completed questionnaire will not be seen by the school or the authorities. There is of course no obligation to complete it, but your co-operation would be much appreciated since it is only when we learn more about children without special problems that we can judge when the occasional child needs particular help.

I appreciate that you may receive many forms through the post and the temptation is to disregard them especially if there are more than a page long. However, though it may appear long on the surface, the present questionnaire on average takes well under fifteen minutes to complete since on most items it merely involves underlining one or more of the choices listed. In the preliminary trial runs many parents reported this an interesting exercise since it directly involved their own child and family. I hope you too find it of interest. Should by chance the child named in this questionnaire have already left school I would be pleased if you would complete it relating to his/her final year of school.

Thanking you in anticipation for your co-operation.

William Conn

Willaim Conn
Psychologist

APPENDIX 4 (Cont'd)

CHILD PROGRESS STUDY

Parental Questionnaire

STRICTLY CONFIDENTIAL: The information on this form is purely for research use. The form will be destroyed as soon as the information has been collated. It will not be seen by the school or by the authorities. For your further protection you have been allocated a serial number to avoid having to state your name or address.

Serial Number: _____

Unless otherwise stated the questions on this form refer to your son/daughter _____
To avoid an irritating repetition of the phrase son/daughter the questions regarding this child will refer to x. Thus a question such as 'Does x child like going to the cinema?' would mean 'Does_____ like going to the cinema?. In most cases you are simply requested to underline whichever answer seems to you to be most appropriate. Please underline clearly in Biro. If you feel very strongly that you do not want to answer a particular question please score it out rather than simply leaving it blank. However since this procedure is entirely confidential I hope you will be willing to answer all questions.

HOUSING INFORMATION

1. DO YOU LIVE IN A HOUSE OR FLAT (please underline your answer)

   house flat

2. ARE YOU BUYING YOUR HOME OR DO YOU RENT IT? (please underline your answer)

   buying renting

3. IF YOU RENT FROM WHICH OF THE FOLLOWING DO YOU RENT? (please underline your answer)

   rent from council rent from private landlord lodging with family

   house goes with job living in a hostel or other temporary accommodation

4. NUMBER OF BEDROOMS? (please specify) _____

PRESENT FAMILY COMPOSITION

5. MARITAL STATUS OF PERSON COMPLETING THIS FORM (please underline as appropriate)

   single married divorced separated widow or widower

6. NAMES, AGES AND SEX OF ALL THE CHILDREN IN THE FAMILY INCLUDING X.
   PLEASE WRITE THE NAME BY WHICH THE CHILD IS KNOW, THEN CIRCLE M OR F FOR MALE OR FEMALE AND THEN ENTER THE CHILDS AGE LAST BIRTHDAY. ENOUGH SPACE HAS BEEN ALLOWED FOR 6 BUT YOU MAY ADD AS MANY AS APPROPRIATE.

   _____ M F AGE _____ _____ M F AGE _____

   _____ M F AGE _____ _____ M F AGE _____

   _____ M F AGE _____ _____ M F AGE _____

OCCUPATIONAL AND HEALTH QUESTIONS

7. FATHERS PRESENT OCCUPATION (please specify in detail e.g.if an engineer state what kind)

   _____

8. FATHERS AGE LAST BIRTHDAY (please underline as appropriate)

   under 21 21 to 25 26 to 30 31 to 35 36 to 40 41 to 45 over 45

9. MOTHERS PRESENT OCCUPATION (please specify and indicate if full time or part time)

   _____

10. MOTHERS OCCUPATION BEFORE HAVING CHILD(REN) IF DIFFERENT FROM THE ABOVE

    _____

APPENDIX 4 (Cont'd)

11. MOTHERS AGE LAST BIRTHDAY (please underline as appropriate)

under 21 21 to 25 26 to 30 31 to 35 36 to 40 41 to 45 over 45

12. APPROXIMATELY HOW MANY TIMES HAS X BEEN TO THE FAMILY DOCTOR IN THE PAST TWELVE MONTHS (please underline your answer)

none up to 3 up to 6 up to 10 more than 10

13. APPROXIMATELY HOW MANY TIMES HAS MOTHER BEEN TO THE FAMILY DOCTOR IN THE PAST TWELVE MONTHS (please underline your answer)

none up to 3 up to 6 up to 10 more than 10

14. APPROXIMATELY HOW MANY TIMES HAS FATHER BEEN TO THE FAMILY DOCTOR IN THE PAST TWELVE MONTHS (please underline your answer)

none up to 3 up to 6 up to 10 more than 10

15. DURING THE PAST TWELVE MONTHS HAS THERE BEEN A SERIOUS ILLNESS/ACCIDENT REQUIRING THREE WEEKS OR MORE MEDICAL TREATMENT INVOLVING SOMEONE TO WHOM X IS VERY CLOSE. (please underline your answer)

not applicable mother father x's brother or sister grandparent aunt or uncle

neighbour other (please specify) _____

IF THERE HAS BEEN MORE THAN ONE SUCH EXPERIENCE PLEASE UNDERLINE EACH OF THEM BUT ALSO CIRCLE THE ONE WHICH YOU FEEL HAD MOST EFFECT ON X.

16. HAS THERE BEEN A DEATH DURING THE PAST TWELVE MONTHS INVOLVING SOMEONE TO WHOM X WAS VERY CLOSE (please underline your answer)

not applicable mother father x's brother or sister grandparent aunt or uncle

neighbour other (please specify) _____

17. HAS EITHER PARENT LEFT HOME DURING THE PAST TWELVE MONTHS FOR ANY OF THE FOLLOWING REASONS (please underline your answer)

not applicable illness work divorce separation other (please specify)_____

IF MORE THAN ONE OF THE ABOVE IS APPROPRIATE PLEASE UNDERLINE EACH AND ALSO CIRCLE THE ONE WHICH YOU FEEL HAD MOST EFFECT ON X

18. HAVE THERE BEEN ANY OTHER CHANGES IN FAMILY CIRCUMSTANCES DURING THE PAST TWELVE MONTHS (please underline all that apply and if more than one is underlined please also circle the one you feel had most effect on x.)

none unemployment of breadwinner new job for breadwinner new brother or sister for x

other (please specify) _____

NOW HERE ARE SOME QUESTIONS ABOUT X'S PROGRESS AND BEHAVIOUR AT HOME AND AT SCHOOL. PLEASE DO NOT ASK X DIRECTLY WHAT HE OR SHE FEELS BUT FILL IN THIS SECTION WITH REGARD TO HOW YOU THINK HE OR SHE FEELS.

19. IN YOUR OPINION DOES X GENERALLY LIKE GOING TO SHOOL (please underline your answer)

a lot about as much as others of the same age not at all

20. OCCASIONALLY CHILDREN WHO ARE RELUCTANT TO ATTEND SCHOOL DISPLAY ONE OR MORE OF THE FOLLOWING PHYSICAL SIGNS WHEN IT COMES TO THE TIME TO GET READY FOR SCHOOL OR TO GO OUT TO SCHOOL. IF THIS HAPPENS WITH X PLEASE UNDERLINE THE APPROPRIATE ITEMS. IF IT DOES NOT HAPPEN UNDERLINE 'NOT APPLICABLE'. SHOULD YOU NEED TO UNDERLINE MORE THAN ONE OF THE SIGNS PLEASE DO SO BUT ALSO CIRCLE THE ONE WHICH YOU FEEL TO BE MOST IMPORTANT.

not applicable stomach upset or stomach pains headache claiming to feel dizzy

going very pale complaining of feeling of going to be sick trembling hiding

fast beating of the heart firmly saying that he/she won't go running away sweating

fainting an expression of fear or horror on his or her face crying screaming struggling

other (please specify) _____

APPENDIX 4 (Cont.)

21. DO THESE PHYSICAL SIGNS GENERALLY DISAPPEAR WHEN PRESSURE TO ATTEND IS TAKEN OFF (please underline your answer)

not applicable within about an hour within about two hours by about lunch time last a day

22. HOW DO YOU USUALLY TRY TO DEAL WITH THIS SITUATION (please underline your answer)

not applicable just insist that x goes to school seek outside help ignore him/her completely

23. WHEN DID YOU LAST HAVE DIFFICULTY GETTING X TO ATTEND BUT NONE THE LESS MANAGED (please underline your answer)

not applicable more than a year ago several months ago last month this month

last week this week nearly every day every day

24. WHEN DID IT LAST PROVE COMPLETELY IMPOSSIBLE TO GET X TO ATTEND SCHOOL (please underline your answer)

never more than a year ago several months ago

last month this month last week this week nearly every day every day

25. HOW OFTEN HAVE THERE BEEN PERIODS OF COMPLETE REFUSAL TO ATTEND SCHOOL (please underline your answer)

none one bad patch years ago several bad patches years ago some recent bad patches

it has always been a problem

26. HOW LONG HAVE THESE BAD PATCHES LASTED ON AVERAGE (please underline your answer)

not applicable one day up to a week up to two weeks up to a month

more than a month

27. HAVE ANY OF X'S BROTHERS OR SISTERS EVER REFUSED TO ATTEND SCHOOL (please underline your answer)

not applicable never occasionally several times frequently

28. WHEN DID THIS LAST HAPPEN (please underline your answer)

this week last week last month several months ago more than a year ago

29. APPROXIMATELY HOW FAR DO YOU LIVE FROM X'S SCHOOL (please underline your answer)

under one mile under two miles under three miles over three miles

30. HOW DOES X USUALLY TRAVEL TO SCHOOL (please underline your answer)

walk bicycle bus train car combination of means

31. HOW SATISFIED ARE YOU WITH X'S GENERAL STANDARD OF EDUCATION (please underline your answer)

very satisfied satisfied uncertain dissatisfied very dissatisfied

32. IF YOU HAD A CHOICE WOULD YOU SEND X TO A DIFFERENT SCHOOL (please underline your answer)

yes no unsure

33. HOW SATISFIED ARE YOU WITH X'S GENERAL STANDARD OF BEHAVIOUR (please underline your answer)

very satisfied satisfied uncertain dissatisfied very dissatisfied

34. HOW DOES X SPEND MOST OF HIS/HER FREE TIME (please underline your answer)

watching television playing with friends at a hobby or sport aimlessly wandering around

listening to records or radio attending a club other (please specify) _____

35. WHERE DOES X SPEND MOST OF HIS/HER FREE TIME WHEN NOT ACTUALLY IN THE HOUSE (please underline your answer)

within clear view of the house within five minutes walk from the house

more than 5 minutes from the house normally don't know where he/she is

APPENDIX 4 (cont'd)

36. HOW EASILY DO YOU FEEL X MAKES FRIENDS (please underline your answer)

very easily fairly easily finds it difficult seems not to bother don't know

37. HOW OLD ON AVERAGE DO X'S FRIENDS APPEAR TO BE (please underline your answer)

about the same age as him or herself younger older a wide mix of ages don't know

38. HOW MANY OF X'S FRIENDS COME FROM HIS OR HER SCHOOL (please underline your answer)

most of them one or two of them none of them has no friends don't know

39. HAS IT EVER COME TO YOUR ATTENTION THAT X HAS STAYED AWAY FROM SCHOOL WITHOUT PERMISSION (please underline your answer)

never once or twice several times frequently don't know

40. WHEN DID IT LAST COME TO YOUR ATTENTION THAT X STAYED AWAY FROM SCHOOL WITHOUT PERMISSION (please underline your answer)

never more than a year ago months ago last month last week this week

41. HAS X HAD ANY PROBLEMS GETTING OFF TO SLEEP DURING THE PAST THREE MONTHS (please underline your answer)

never occasionally frequently don't know

42. DOES X HAVE BAD DREAMS WHICH WAKE HIM/HER IN THE NIGHT (please underline your answer)

never about once a month about once a week more than once a week

nearly every night don't know

43. HAS X WET THE BED DURING THE PAST TWELVE MONTHS (please underline your answer)

not all once or twice about once a month about once a week several times a week

44. HAS X ANY SPECIAL FEARS OR ANXIETIES ABOUT WHICH YOU KNOW CONCERNING ANY OF THE FOLLOWING (please underline your answer. If more than one underline each and circle the most important one)

insects darkness enclosed spaces animals going out water heights

open spaces any other fears (please specify) _____

45. IF THERE IS ANY FEATURE OF YOUR FAMILY LIFE OR OF X'S DEVELOPMENT WHICH YOU FEEL TO BE IMPORTANT BUT WHICH SEEMS NOT TO HAVE BEEN COVERED ADEQUATELY OR AT ALL BY THIS QUESTIONNAIRE (please specify)

_____

_____

_____

46. RELATIONSHIP TO X OF PERSON COMPLETING THIS QUESTIONNAIRE (please underline your answer

mother father stepmother stepfather guardian other

(please specify) _____

47. DATE OF COMPLETION OF QUESTIONNAIRE _____

Thank you for your co-operation with this survey. Please return the questionnaire in the envelope provided. No postage stamp is needed. Again let me assure you of the confidentiality of your replies. No one but me will have access to the information and no use will be made of the information other than for the direct purposes of this research. Your child will not be named or in any way identified in this.

With your help in completing this questionnaire I hope to be able to identify general factors relating to why some children may attend better, seem to enjoy school more and to become more successful in their studies. The long term goal is that children who may be developing problems will be identified earlier and helped to overcome any difficulties before they become too severe.

Again thanking you for your co-operation,

William Conn,
Educational Psychologist,
School Psychological Service,
St.Pauls Wood Hill,
Orpington, Kent.

APPENDIX 5

CHILD PROGRESS STUDY

NAME OF SCHOOL _____

NAME OF CHILD _____ YEAR _____

(Ref: M. Rutter: J. Child Psychol. Psychiat. Vol. 8. 1967)
Below is a series of descriptions of behaviour often shown by children. After each statement are three columns: "Doesn't Apply", "Applies Somewhat" and "Certainly Applies". If the child definitely shows the behaviour described by the statement, place a cross in the box under "Certainly Applies". If the child shows the behaviour described but to a lesser degree or less often place a cross in the box under "Applies Somewhat". If the child does no,so far as you are aware, show the behaviour place a cross under "Doesn't Apply". Please put only one cross against EACH statement.

STATEMENT	Doesn't Apply	Applies Somewhat	Certainly Applies
1. Very restless. Often running about or jumping up and down. Hardly ever still			
2. Truants from school			
3. Squirmy,fidgety child			
4. Often destrpys own or others belongings			
5. Frequently fights with other children			
6. Not much liked by other children			
7. Often worried,worries about many things			
8. Tends to do things on his own - rather solitary ...			
9. Irritable. Is quick to "fly off the handle"			
10.Often appears miserable,unhappy, tearful or distressed			
11.Has twitches,mannerisms or tics of the face or body			
12.Frequently sucks thumb or finger			
13.Frequently bites nails or fingers			
14.Tends to be absent from school for trivial reasons			
15. Is often disobedient			
16.Has poor concentration or short attention span			
17. Tends to be fearful or afraid of new things or new situations			
18.Fussy or over particular child			
19.Often tells lies			
20.Has stolen things on one or more occasions			
21.Has wet or soiled at school during this year			
22.Often complains of pains or aches			
23.Has had tears on arrival at school or has refused to come into the building this year			
24.Has stutter or stammer			
25.Has other speech difficulty			
26.Bullies other children			

How well do you know this child? VERY WELL ☐ MODERATELY WELL ☐ NOT VERY WELL ☐

Signed by. ..... Date: .....

Designation .....

APPENDIX C

NAME _____ SEX _____ SERIAL NUMBER _____

NAME OF SCHOOL _____

Here are some questions about your class. Read each one very carefully before writing down any names. These are questions about pupils you would choose to do different things with. You will like to do some things with some children but not with others. You may put down the same name for more than one question if you really would choose the same person. Please choose only from among the pupils in THIS class.

THE NAMES YOU CHOOSE WILL NOT BE SEEN BY ANY OTHER PUPIL OR BY THE SCHOOL STAFF

A. Write down the names of pupils in this class you most like to sit beside.
(start with the one you like best to sit beside, then the next one and so on.
You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

Write down the names of pupils in this class you least like to sit beside.
(start with the one you like least to sit beside, then the next one and so on.
You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

B. Write down the names of pupils in this class you would ask for help with your work.
(start with the one you would choose to ask first, then the next one and so on.
You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

Write down the names of pupils in this class you would be least likely to ask for help with your work.
(start with the one you would be least likely to ask, then the next one and so on.
You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

APPENDIX 8 (Cont'd)

C. write down the names of pupils in this class you would most trust to tell a secret to.

(start with the one you would most trust, then the one you would trust next and so on. You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

write down the names of pupils in this class you would never trust to tell a secret to.
(start with the one you would least trust, then the next one and so on. You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

D. write down the names of pupils in this class you would most like to go on holiday with.

(start with the one you would most like to go with, then the next one and so on. You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

write down the names of pupils in this class you would least like to go on holiday with.

(start with the one you would least like to go with, then the next one and so on. You may have as many or as few as you like - even more than the six spaces I have given you)

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

All the questions you have been answering on this sheet have been about pupils in your class Now I want you to write down a list of your best friends. They need not be in this class or in this school though of course they may be the same ones if they really are your best friends. Start with the person you like best, then the next one and so on. You may have as many or as few as you like-even more than the six spaces I have given you.

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

NOW PLEASE PUT A CIRCLE ROUND THE NAME OF ANY OF THESE FRIENDS WHO DO NOT GO TO THIS SCHOOL

APPENDIX 7

This appendix provides the necessary information on the variables entered in the Discriminant Function Analysis based on Pupil Questionnaire items for BOYS together with the Standardized Discriminant Function Coefficients which emerged following a Step Wise Analysis (Method Wilks) Nie et al 1975.

The following information is intended as a key to new or modified variables and to save repetitive reference back to the Pupil Questionnaire itself (Appendix 1) or to the list of variables (Appendix 30).

GENSATSCH: (General Satisfaction with School). This is a new variable created by summing the scores on V8 'I am usually satisfied with my own behaviour in school', V10 My parents are usually satisfied with my behaviour at home, V13 I am usually satisfied with the standard of my own work in school, V15 My parents are usually satisfied with the standard of my work in school, V17 My teachers are usually satisfied with the standard of my work in school, V20 I like school, V24 My teachers are usually satisfied with the standard of my behaviour in school and V27 I am usually happy at home. The choice of these 8 items was based on the Factor Analysis of the Pupil Questionnaire data reported fully in the MEASURES section.

VULSCH: (Vulnerability in School). This is also a new variable created on the basis of the Factor Analysis of the Pupil Questionnaire Data. It consists of the following 8 items. V14 I am sometimes teased at school, V16 Sometimes I feel afraid of my teacher, V18 Sometimes I become worried or frightened without any special reason, V19 This class is too badly behaved for me to get any proper work done, V22 I don't like changing for games or having showers in school, V25 I am sometimes bullied in school, V26 Sometimes I worry that something could happen to my mum or dad while I'm in school and V67 Seriousness of fears.

INPERANX: (Interpersonal Anxiety). This is the third of the three factors created on the basis of the Factor Analysis of the Pupil Questionnaire data for BOYS. It consists of the following 4 items. V11 I would go to a different school if I could, V21 Sometimes I feel I have no one I can really talk to, V32 I have bad dreams which wake me in the night and V40 Difficulty in making friends.

V12: 'In school I like it when we go on to some completely new kind of work'.

V23: 'I never find my school work too difficult'.

FA: Get on best with Father.

MO: Get on best with mother.

SME: Get on Same with both parents

APPENDIX 7 Contd.,

NEI: Get on with Neither parent.

ONL: I have only one parent.

RM: I have a bedroom to myself.

FFS: Most of my friends come from my school.

SMAG: Most of my friends are the same age as me.

YNG: Most of my friends are younger than me.

OLD: Most of my friends are older than me.

MIX: My friends are a wide mix of ages.

BOY: Most of my friends are boys.

GRL: Most of my friends are Girls.

EQL: My friends are about equal numbers boys and girls.

V30: I have difficulty getting off to sleep.

V31: I wake during the night.

V33: I spend my spare time watching television.

V34: I spend my spare time playing with friends.

V35: I spend my spare time at a hobby or sport.

V36: I spend my spare time aimlessly wandering around.

V37: I spend my spare time listening to the radio or records.

V38: I spend my spare time attending a club.

V55: Have you ever stayed away from school by pretending to be sick.

V56: When did you last stay away from school without your parents knowing.

V57: If you stayed away were you by yourself of with others.

The next 9 variables sample the presence or absence of the following fears or anxieties:

V58: Insects. V59: Darkness. V60: Enclosed Spaces. V61: Animals. V62: Going Out. V63: Water. V64: Heights. V65: Open Spaces. V66: Other fears.

APPENDIX 7 (Contd.,)

Standardized Discriminant Function Coefficients

	FUNC 1	FUNC 2	FUNC 3
GENSATSC	0.37117	-0.21435	-0.09913
VULSCH	-0.08609	-0.13777	0.48419
INPERANX	-0.29512	0.07652	0.36359
V12	-0.06862	-0.28097	-0.11302
SME	0.04329	0.41112	0.21520
RM	-0.29566	0.37027	0.24694
FFS	-0.33824	0.02095	-0.04124
SMAG	0.28948	-0.04312	0.09929
YNG	0.21289	-0.30737	0.21133
V30	0.07504	0.53685	0.21542
V31	0.28418	0.07456	-0.18469
V33	-0.33133	0.04719	-0.26101
V35	0.02360	-0.09557	-0.59303
V37	-0.07417	-0.19948	0.23104
V38	0.31575	-0.11713	-0.07246
V55	0.29021	0.35912	0.03726
V57	0.44206	0.14975	0.38528
V58	-0.45730	-0.15784	-0.23710
V59	0.43239	-0.12915	0.28917
V62	0.09950	0.55667	0.04478
V66	0.13859	-0.17848	0.30224

APPENDIX 8

This appendix provides the necessary information on the variables entered in the Discriminant Function Analysis based on the Pupil Questionnaire items for GIRLS together with the Standardized Discriminant Function Coefficients of the variables which emerged following Step Wise Analysis (Method Wilks) Nie et al 1975.

The following is intended as a key to new or modified variables and to save repetitive reference back to the Pupil Questionnaire itelf (Appendix 1) or to the list of variables (Appendix 30).

GENSATSCH: (General Satisfaction with School). This is a new variable created by summing the scores on V8 'I am usually satisfied with my own behaviour in school', V10 My parents are usually satisfied with my behaviour at home, V13 I am usually satisfied with the standard of my own work in school, V15 My parents are usually satisfied with the standard of my work in school, V17 My teachers are usually satisfied with the standard of my work in school, V20 I like school and V24 My teachers are usually satisfied with the standard of my behaviour in school. The choice of these 7 items was based on the Factor Analysis of the Pupil Questionnaire data reported fully in the MEASURES section.

VULSCH: (Vulnerability in School). This is also a new variable created on the basis of the Factor Analysis of the Pupil Questionnaire Data. It consists of the following 6 items. V14 I am sometimes teased at school, V18 Sometimes I become worried or frightened without any special reason, V19 This class is too badly behaved for me to get any proper work done, V21 Sometimes I feel I have no one I can really talk to, V25 I am sometimes bullied in school, V27 I am usually happy at home.

SCHAVD: (School Avoidance). This is the third of the three factors created on the basis of the initial Factor Analysis of the Pupil Questionnaire for GIRLS. It consists of only two items : V55 Have you ever stayed away from school by pretending to be sick and V 56 When did you last stay away without your parends knowing.

V11: I would go to a different school if I could.

V12: 'In school I like it when we go on to some completely new kind of work'

V16: 'Sometimes I feel afraid of my teacher'.

V22: 'I don't like changing for games or showers in school

V23: 'I never find my school work too difficult'.

V24: 'My teachers are usually satisfied with my behaviour in school.

APPENDIX 8 contd.,

V26: 'Sometimes I worry that something could happen to my mum or dad while I'm in school.

FA: Get on best with my father

MO: Get on best with mother.

SME: Get on Same with both parents

NEI: Get on with Neither parent.

ONL: I have only one parent.

RM: I have a bedroom to myself.

DF: Difficulty making friends.

FFS: Most of my friends come from my school.

SMAG: Most of my friends are the same age as me.

YNG: Most of my friends are younger than me.

OLD: Most of my friends are older than me.

MIX: My friends are a wide mix of ages.

BOY: Most of my friends are boys.

GRL: Most of my friends are Girls.

EQL: My friends are about equal numbers boys and girls.

V30: I have difficulty getting off to sleep.

V31: I wake during the night.

V32: 'I have bad dreams which wake me in the night'.

V33: I spend my spare time watching television.

V34: I spend my spare time playing with friends.

V35: I spend my spare time at a hobby or sport.

V36: I spend my spare time aimlessly wandering around.

V37: I spend my spare time listening to the radio or records.

V38: I spend my spare time attending a club.

The next 9 variables sample the presence or absence of the following fears or anxieties: V58: Insects. V59: Darkness. V60: Enclosed Spaces. V61: Animals. V62: Going Out. V63: Water. V64: Heights. V65: Open Spaces. V66: Other fears.

V67: How serious is the problem of these fears for you.

APPENDIX 8 (Contd.,)

Standardized Discriminant Function Coefficients

	FUNCTION 1	FUNCTION 2	FUNCTION 3
GENSATSC	0.12379	-0.44903	-0.55120
VULSCH	-0.11493	0.16469	-0.25933
V11	-0.26640	0.47553	0.14518
V13	-0.12522	-0.01349	0.31725
V22	0.44629	0.15824	-0.03348
V24	0.31932	0.39434	0.33265
V26	-0.17716	0.05716	0.30063
SME	0.10738	-0.16756	-0.18135
NEI	0.12504	0.42674	-0.45066
RM	0.29583	-0.01944	-0.06510
V30	0.44901	0.15807	0.16802
V31	-0.11309	-0.34226	-0.11153
V32	0.24055	0.12355	0.07687
V33	0.17145	-0.04952	0.30474
V34	-0.26883	-0.15170	-0.14344
V36	0.20668	0.26596	0.05175
V37	-0.00903	0.24276	0.47998
V38	-0.28724	-0.19577	-0.13834
DF	0.32843	-0.30463	0.11512
FFS	-0.37954	-0.03107	-0.04639
OLD	-0.28001	-0.73411	0.25165
MIX	-0.26024	-0.12903	-0.02881
EQL	-0.22466	-0.15468	0.44617
V58	-0.14245	0.41044	0.20457
V59	0.11057	0.17154	-0.33379
V62	0.41087	0.15553	0.17119
V64	0.09981	0.14319	-0.39070
V66	-0.19135	-0.12459	-0.16002
V67	-0.16999	0.44832	-0.14980

APPENDIX (9)

Chi Sq analyis of Rutter Scale Data for V79: Frequent fights, V80: Not much liked and and V82: Rather solitary.

	AA	CON	AA	DA	DA	CON
N=	16	84	16	44	44	84
Frequent Fights						
Doesn't Apply	15 94%	76 91%	15 94%	35 90%	35 90%	76 91%
Applies Somewhat	1 6%	7 8%	1 6%	3 8%	3 8%	7 8%
Certainly Applies	0 0%	1 1%	0 0%	0 2%	1 2%	0 0%
χ^2	.279		.463		.324	
df	2		2		2	
p	.869		.793		.850	
Not much liked						
Doesn't Apply	14 87%	67 81%	14 87%	32 82%	32 82%	67 81%
Applies Somewhat	1 6%	12 14%	1 6%	5 13%	5 13%	12 14%
Certainly Applies	1 6%	4 5%	1 6%	2 5%	2 5%	4 5%
χ^2	.817		.515		.061	
df	2		2		2	
p	.664		.773		.969	
Rather Solitary						
Doesn't Apply	12 75%	62 74%	12 75%	24 62%	24 62%	62 74%
Applies Somewhat	3 19%	17 20%	3 19%	12 31%	12 31%	17 20%
Certainly Applies	1 6%	5 6%	1 6%	3 8%	3 8%	5 6%
χ^2	.264		.947		2.69	
df	2		2		2	
p	.966		.623		.445	

APPENDIX (10)

Correlations between difficulty in making friendships and other pupil variables: SP BOYS

No	Variable	N	r	p
8	Dissatisfaction with own behaviour in school	30	.576	.000
13	Dissatisfaction with own work	30	.644	.000
23	Finding work difficult	30	.622	.000
17	Feeling teachers are dissatisfied with work	30	.429	.009
24	Feeling teachers are dissatisfied with behaviour	30	.387	.017
20	Dislike of school	30	.408	.013
11	Wish to go to another school	30	.524	.001
27	Feeling unhappy at home	30	.427	.005
9	Anxiety at the thought of going to school	30	.465	.005
53	Frequency of psychosomatic symptoms	30	.337	.034
67	Self-perceived seriousness of other fears	30	.467	.005
18	Being worried without any special reason	30	.433	.008
21	Feeling of having no one to really talk to	30	.599	.001
5	Feeling bullied	30	.292	.058
30	Problems getting off to sleep	30	.344	.032
31	Unwelcome nighttime waking	30	.271	.077

Correlations between difficulty making friendships and other pupil variables: AA BOYS

No	Variable	N	r	p
6	Ability	21	.564	.004
12	Dissatisfaction with own work	21	.369	.050
15	Feeling parents satisfied with work	21	.306	.089
16	Feel afraid of teachers	21	.673	.000
19	Feel class too badly behaved to get work done	21	.371	.043
21	Feeling of having no one to really talk to	21	.299	.094
26	Worry regarding mother or father while at school	21	.316	.081
53	Frequency of psychosomatic symptoms	21	.323	.077
32	Bad dreams	21	.316	.081
129	Total number of negative made (on sociometrics)	21	.807	.000

APPENDIX (10) Continued

Correlation between difficulty in making friendships and other pupil variables: DA BOYS

No	Variable	N	r	p
9	Anxiety regarding attending school	44	.368	.007
20	Dislike of school	44	.213	.082
8	Dissatisfaction with own behaviour in school	44	.220	.074
24	Feeling teachers dissatisfied with behaviour in school	44	.238	.059
11	Desire to change school	44	.542	.000
14	Feeling of being teased	44	.359	.008
25	Feeling of being bullied	44	.382	.005
19	Class too badly behaved to get proper work done	44	.197	.099
10	Feeling parents dissatisfied with behaviour at home	44	.439	.001
14	Feeling of having no one really to talk to	44	.379	.006
67	Self-perceived seriousness of other fears	44	.292	.027

Correlation between difficulty making friendships and other pupil variables: CON BOYS

No	Variable	N	r	p
5	Age	88	.173	.049
11	Desire to change school	88	.184	.045
16	Feeling afraid of teachers	88	.196	.034
21	Feeling of having no one to really talk to.	88	.23	.016

APPENDIX (11)

Rutter Scale data for V79: Frequent fights, V80 Not much liked and V82: Rather Solitary

GIRLS

	AA	CON	AA	DA	DA	CON
N=	17	103	17	44	44	103
Frequent fights						
Doesn't apply	17 100%	96 93%	17 100%	41 93%	41 93%	96 93%
Applies somewhat	0 0%	6 6%	0 0%	3 7%	3 7%	6 6%
Certainly applies	0 0%	1 1%	0 0%	0 0%	0 0%	1 1%
χ^2	1.22		1.21		.476	
df	2		2		2	
p	.541		.269		.787	
Not much liked						
Doesn't apply	12 71%	94 91%	12 71%	36 82%	36 82%	94 91%
Applies somewhat	5 29%	9 9%	5 29%	8 18%	8 18%	9 9%
Certainly applies	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
χ^2	6.05		.922		2.69	
df	1		1		1	
p	.013*		.337		.101	
Rather solitary						
Doesn't apply	12 71%	82 80%	12 71%	36 82%	36 82%	82 80%
Applies somewhat	5 29%	20 19%	5 29%	7 16%	7 16%	20 16%
Certainly applies	0 0%	1 1%	0 0%	1 2%	1 2%	1 1%
χ	1.01		1.71		.609	
df	2		2		2	
p	.601		.423		.737	

*significant at or beyond the .05 level

APPENDIX 12

Correlation between difficulty making friendships and other pupil variables: SP GIRLS

No	Variable	N	r	p
18	Being worried without any special reason	19	.485	.018
9	Anxiety regarding attending school	19	.322	.089
53	Frequency of psychosomatic symptoms	19	.480	.019
54	Feelings symptoms are serious	19	.515	.012
14	Feeling teased in school	19	.311	.097
21	Feeling no one to talk to	19	.459	.024
19	Feeling class too badly behaved	19	.427	.034

Correlation between difficulties in making friendships and other pupil variables: AA GIRLS

No	Variable	N	r	p
6	Ability	17	.542	.023
9	Anxiety regarding attending school	17	.425	.044
53	Frequency of psychosomatic symptoms	17	.523	.015
18	Being worried without any special reason	17	.471	.028
14	Feeling of being teased	17	.527	.015
25	Feeling of being bullied	17	.605	.005
21	Feeling no one to really talk to	17	.574	.008
67	Self-perceived seriousness of other fears	17	.421	.046
30	Problems sleeping	17	.358	.079
31	Unwelcome reawakening	17	.340	.083

APPENDIX 12 (continued)

Correlation between difficulties in making friendships and other pupil variables: DA GIRLS

No	Variable	N	r	p
5	Age	49	.204	.079
10	Feeling parents dissatisfied with behaviour at home	49	.192	.093
15	Feeling parents dissatisfied with school work	49	.247	.043
17	Feeling teachers dissatisfied with their school work	49	.228	.050
67	Self-perceived seriousness of other fears	49	.244	.045

Correlation between difficulties in making friendships and other pupil variables: CON GIRLS

No	Variable	N	r	p
6	Ability	92	.149	.089
17	Feeling teachers dissatisfied with their school work	92	.186	.023
30	Problems sleeping	92	.158	.050
32	Bad dreams	92	.133	.070
67	Self-perceived seriousness of other fears	92	.138	.070

APPENDIX (13)

Age of Friends by group membership - Parental Perspective - BOYS

	SP	DA	SP	CON	DA	CON
N=	30	18	30	30	18	30
Same age	12 40%	8 44%	12 40%	23 77%	8 44%	23 77%
Younger	9 30%	3 17%	9 30%	1 3%	3 17%	1 3%
Older	5 17%	4 22%	5 17%	4 13%	4 22%	4 13%
Wide mix	4 13%	3 17%	4 13%	2 7%	3 17%	2 7%
χ^2	1.12		10.63		5.82	
df	3		3		3	
p	.771		.014*		.120	

*significant at or beyond the .05 level

APPENDIX (14)

Friends from school by group membership - Parental data - BOYS.

	SP	DA	SP	CON	DA	CON
N=	30	18	30	30	18	30
Most of them	13 43%	11 61%	13 43%	10 33%	11 61%	10 33%
None or some	17 57%	7 39%	17 57%	20 67%	7 39%	20 67%
χ^2	1.42		.634		3.52	
df	1		1		1	
p	.233		.425		.06	

APPENDIX (15)

Chi Square analysis of VULSCH constituent items by group membership - BOYS.

Variable	SP	AA	DA	CON		df	p
N=	30	21	44	88			
Feeling teased	18 60%	16 76%	34 80%	43 51%	12.3	3	.006*
Afraid of teacher	4 13%	2 10%	5 11%	6 7%	1.4	3	.694
Worry for no reason	15 50%	8 39%	14 32%	8 9%	25.2	3	.0000*
Class too badly behaved	5 17%	9 43%	11 25%	27 31%	7.23	3	.064
Dislike of changing and showers	8 26%	10 48%	17 39%	29 34%	2.8	3	.422
Feeling bullied	14 47%	10 48%	10 23%	20 23%	10.5	3	.014*
Worry re Mum or dad while at school	7 23%	8 38%	14 32%	34 39%	2.6	3	.460
Seriousness of fears	5 17%	1 5%	6 14%	10 11%	1.8	3	.614

*=significant at or above .05 level.

APPENDIX (16)

Chi Square analysis of VULSCH constituent items by group membership - GIRLS

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	19	108			
Feeling teased	5 27%	8 47%	18 37%	36 35%	10.8	6	.094
Worry for no special reason	14 73%	10 58%	21 41%	21 20%	37.8	6	.0000*
Class too badly behaved	2 11%	7 41%	8 16%	22 21%	9.1	6	.174
Feeling of having no one to talk to	12 63%	9 53%	28 57%	71 60%	9.2	6	.161
Feeling Bullied	0 0%	7 41%	9 18%	10 9%	18.7	6	.004*
Usually happy at home	16 84%	14 88%	39 80%	90 83%	2.2	6	.901

*significant at or beyond the .05 level

APPENDIX (17)

Chi Square Analysis of the GenSatSch constituent items by group membership

Variable	SP	AA	DA	CON	χ^2	df	p
N=	30	21	44	88			
Satisfied own behaviour in school	17 57%	12 57%	37 84%	51 58%	10.2	3	.016*
Parents satisfied home behaviour	16 53%	19 91%	27 62%	58 66%	8.1	3	.043*
Satisfied own work in school	14	13	25	51	1.5	3	.681
Parents satisfied with school work	19 63%	13 62%	28 64%	41 47%	5.1	3	.165
Teachers satisfied with school work	12 40%	4 20%	27 61%	40 45%	10.8	3	.013*
Like School	12 40%	3 15%	21 48%	29 33%	7.5	3	.057
Teachers satisfied with behaviour	17 56%	12 57%	32 73%	36 41%	12.3	3	.006*
Usually happy at home	23	18	43	75	7.5	3	.056

* significant at or beyond the .05 level

APPENDIX (18)

Chi Square Analysis of GenSatSch constituent items by group membership

Variable	SP	AA	DA	CON	χ^2	df	p
N=	19	17	49	108			
Satisfied own behaviour in school	17 89%	8 47%	30 61%	70 65%	13.20	6	.039*
Parents satisfied home behaviour	15 79%	8 47%	27 56%	79 73%	12.05	6	.06
Satisfied own work in school	14 74%	7 46%	27 55%	75 70%	12.20	6	.057
Parents satisfied school work	15 79%	15 89%	32 65%	78 73%	8.66	6	.173
Teachers satisfied school work	12 63%	6 37%	21 44%	49 46%	11.55	6	.072
I like school	11 58%	7 41%	30 61%	60 56%	4.20	6	.648
Teachers satisfied with behaviour	17 89%	5 30%	26 53%	59 54%	17.60	6	.007*

*significant at or beyond the .05 level

APPENDIX 19

The Rutter Child Behaviour Scale (Appendix 5) is designed to yield a score for a Neurotic subscale and a score for an Anti Social subscale. The items which make up these subscales are scored in the same way as the overall scale on which Doesn't Apply is scored 0, Applies Somewhat is scored 1 and Certainly Applies scores 2.

The Neurotic subscale is comprised of items 7, 10, 17, and 23. The Anti Social subscale is comprised of items 4, 5, 15, 19, 20 and 26.

In the present study Rutter Scale data are available on the AA, DA and CON groups but not on SP's. Table (A) below presents the results of an analysis of the mean differences for boys on the Neurotic Subscale.

Table (A) 't' test comparisons among AA, DA and CON boys on the Rutter Neurotic Subscale

Neurotic	AA	DA	AA	CON	DA	CON
N	16	39	16	81	39	81
X	1.00	0.59	1.00	0.52	0.59	0.52
SD	0.89	0.88	0.89	0.85	0.88	0.85
SE	0.22	0.14	0.22	0.09	0.14	0.09
t	1.56		1.96		0.39	
df	53		96		119	
p	0.124		0.069		0.697	

Though there is a trend toward significance between the AA and the CON boys overall there appear not to be any significnt differences on the Neurotic subscale of the Rutter Scale. Table (B) below presents the parallel findings for the girls groups.

Table (B) 't' test comparisons among AA, DA and CON girls on the Rutter Neurotic Subscale

Neurotic	AA	DA	AA	CON	DA	CON
N	17	43	17	102	43	102
X	0.52	0.79	0.52	0.55	0.79	0.79
SD	0.94	1.68	1.68	1.20	1.68	1.20
SE	.229	.257	.229	.119	.257	.119
t	-0.76		-0.06		0.85	
df	50.93		117		60.72	
p	0.45		0.95		0.39	

No significant differences were found on the Neurotic subscale for the girls in this study.

APPENDIX 19 contd.,

Table (C) below presents the results of an analysis of the mean differences on the Rutter Anti-Social subscale for boys.

Table (C) 't' test comparison among AA, DA and CON boys on the Rutter Anti-Social subscale

Anti-Social	AA	DA	AA	CON	DA	CON
N	16	39	16	81	39	81
X	0.25	0.36	0.25	0.87	0.36	0.87
SD	1.00	0.99	1.00	1.94	0.99	1.94
SE	0.25	0.15	0.25	0.21	0.15	0.21
t	-0.38		-1.90		-1.96	
df	53.00		41.23		117.88	
p	0.80		0.07		0.06	

This analysis reveals no statistically significant differences on the Anti-Social subscale though there are trends towards significance between the AA and CON boys and between the DA and CON boys.

Table (D) presents the parallel findings on the anti-social subscale for the girls groups.

Table (D) 't' test comparisons among AA, DA and CON girls on Rutter Anti-Social subscale

Anti-Social	AA	DA	AA	CON	DA	CON
N	17	43	17	103	43	103
X	0.35	0.42	0.35	0.54	0.42	0.54
SD	0.79	1.43	0.79	1.28	1.43	1.28
SE	0.19	0.21	0.19	0.12	0.21	0.12
t	-0.23		-0.83		-0.52	
df	51.73		32.16		144.00	
p	0.82		0.41		0.62	

As was the case with the girls data in connection with the Neurotic subscale the mean differences on the anti-social subscales are not statistically significant. Unlike the boys data there is not trend in the direction of significance.

APPENDIX (20)

Spare time activity by group. Parental views - BOYS

	SP	DA	CON	χ^2	df	p
N=	30	18	30			
Watching television	8 27%	3 17%	2 7%	4.32	2	.115
Playing with friends	8 27%	7 39%	2 7%	7.50	2	.023*
Hobby or sport	2 7%	1 6%	4 13%	1.15	2	.562
Wandering around	7 23%	0 0%	2 7%	7.10	2	.028*
Records or radio	5 17%	5 28%	7 23%	0.882	2	.643
Attending a club	0 0%	0 0%	3 10%	4.99	2	.082
Other	0 0%	0 0%	3 10%	4.99	2	.082

*significant at or beyond the .05 level

APPENDIX (21)

Proximity to home in relation to spare time activity - BOYS

Variable	SP	CON	SP	DA	DA	CON
N=	30	30	30	18	18	30
Within View	2 7%	1 3%	2 7%	1 6%	1 6%	1 3%
Within five mins	13 43%	9 30%	13 43%	8 44%	8 44%	9 30%
More than five mins	14 47%	14 47%	14 47%	9 50%	9 50%	14 47%
Don't Know	1 3%	6 20%	1 3%	0 0%	0 0%	6 20%
χ^2	4.63		.651		4.42	
df	3		3		3	
p	.2008		.375		.750	

APPENDIX (22)

Spare time activity by group membership - Parental report - GIRLS

Variable	SP	CON	χ^2	df	p
N=	19	25			
Watching television	2 11%	1 4%	.72	1	.394
Playing with friends	2 11%	7 28%	1.80	1	.174
Hobby or sport	0 0%	5 20%	4.28	1	.038*
Wandering around	3 16%	1 4%	.02	1	.886
Listening to records/radio	7 37%	7 28%	.50	1	.477
Attending a club	0 0%	2 8	1.59	1	.206
Other	5 26%	2 8%	2.70	1	.099

* significant at or beyond the .05 level.

APPENDIX (23)

Proximity to home when not in school - GIRLS

Variable	SP	CON	χ^2	df	p
N=	19	25			
Within view	4 21%	2 8%			
Within five minutes	9 47%	4 16%	10.6	3	.013
More than five minutes	4 21%	18 72%			
Don't know	1 5%	1 4%			

*significant at or beyond the .05 level

APPENDIX (24)

Truancy by group membership. Parental data.

BOYS

Variable	SP	DA	CON	χ^2	df	p
N=	30	18	30			
Never Truanted	20 67%	17 94%	21 70%	5.03	2	.08
At least once	10 33%	1 6%	9 30%			

APPENDIX (25)

'Truants from school' - Teachers perception

BOYS

	AA	DA	CON	χ^2	df	p
N=	16	39	84			
Doesn't apply	16 100%	38 97%	69 82%	8.6	4	.07
Applies Somewhat	0 0%	1 3%	10 12%			
Certainly applies	0 0%	0 0%	5 6%			

APPENDIX (26)

'Absent for trivial reasons' - Teachers perceptions

BOYS

Variable	AA	DA	CON	χ^2	df	p
N=	16	39	84			
Doesn't apply	16 100%	37 95%	78 93%			
Applies somewhat	0 0%	2 5%	5 6%	1.6	4	.795
Certainly applies	0 0%	0 0%	1 1%			

APPENDIX (27)

Truancy by group membership - Parental Data

GIRLS

Variabale	SP	CON	χ^2	df	p
N	19	25			
Never truanted	18 95%	24 96%	.039	1	.499
At least once	1 5%	1 4%			

APPENDIX (28)

'Truants from school' - Teacher perceptions - GIRLS

Variable	AA	DA	CON	χ^2	df	p
N=	17	44	103			
Doesn't apply	16 94%	41 93%	100 97%	3.36	4	.499
Applies Somewhat	0 0%	2 5%	2 2%			
Certainly applies	1 6%	1 2%	1 1%			

APPENDIX (29)

'Absent for trivial reasons' - Teacher Perceptions

GIRLS

Variable	AA	DA	CON	χ^2	df	p
N=	17	44	103			
Doesn't apply	14 82%	32 73%	97 94%	14.5	4	.005*
Applies Somewhat	3 18%	10 23%	4 4%			
Certainly applies	0 0%	2 4%	2 2%			

* significant at or beyond the .05 level

APPENDIX 30

VARIABLE LIST

The numbers in the left hand column are the variable numbers. Where these relate to questionnaire items the essence of that item is provided in inverted commas. The full form of the questionnaires are recorded in appendices 1, 2, 5, and 6.

1 School attended
2 School year
3 Identification code
4 Sex
5 Chronological age
6 Intelligence quotient
7 Reading Age
8 Pupil Questionnaire item 1 - 'satisfied own behaviour in school'
9 Pupil Questionnaire item 2 - 'become very anxious at thought of school but don't know why'
10 Pupil Questionnaire item 3 - 'feel parents satisfied behaviour at home
11 Pupil Questionnaire item 4 - 'go to different school if could'
12 Pupil Questionnaire item 5 - 'Like going on to new work in school
13 Pupil Questionnaire item 6 - 'Usually satisfied with standard of own school work
14 Pupil Questionnaire item 7 - 'feel teased at school'
15 Pupil Questionnaire item 8 - 'feel parents satisfied with school work'
16 Pupil Questionnaire item 9 - 'sometimes feel afraid of teachers'
17 Pupil Questionnaire item 10 - 'feel teachers satisfied with school work'
18 Pupil Questionnaire item 11 - 'sometimes worried or frightened without special reason'
19 Pupil Questionnaire item 12 - 'feel class too badly behaved to get proper work done'
20 Pupil Questionnaire item 13 - 'like school'
21 Pupil Questionnaire item 14 - 'feel there's no one can really talk to'
22 Pupil Questionnaire item 15 - 'don't like changing for games or showering'
23 Pupil Questionnaire item 16 - 'never find school work too difficult'
24 Pupil Questionnaire item 17 - 'feel teachers satisfied with behaviour in school'
25 Pupil Questionnaire item 18 - 'feel bullied in school
26 Pupil Questionnaire item 19 - 'feel worried that something could happen to mum or dad during school time'
27 Pupil Questionnaire item 20 - ' usually happy at home'
28 Pupil Questionnaire item 21 - 'usually get on best mum/dad/both same/neither one/have only one/'

APPENDIX 30 contd.,

29 Pupil Questionnaire item 22 - 'bedroom to self'
30 Pupil Questionnaire item 23 - 'problems getting to sleep in past three months or so'
31 Pupil Questionnaire item 24 - 'unwanted nighttime waking'
32 Pupil Questionnaire item 25 - 'bad dreams which wake me in night'
Pupil Questionnaire item 26 - 'How do you spend most of your spare time'
33 Watching Television
34 Playing with friends
35 At a hobby or sport
36 Aimlessly wandering around
37 Listening to records or radio
38 Attending a club
39 Other
40 Pupil Questionnaire item 27 - 'feel make friends - very easily/fairly easily/find it difficult/ want to make friends but somewhat cannot/'
41 Pupil Questionnaire item 28 - 'friends from present school ..most/one or two/none/no friends'
42 Pupil Questionnaire item 29 - 'friends mostly about the same age as self/younger/older/wide mix'
43 Pupil Questionnaire item 30 - 'most friends are boys/girls/about equal numbers of each'
Pupil Questionnaire item 31 - 'Sometimes before going to school I...'
44 Get a headache
45 Get a tummy ache
46 Tremble
47 Feel very frightened
48 My heart beats too fast
49 I feel I'm going to be sick
50 I feel dizzy
51 Other feelings
52 I feel OK
53 Pupil Questionnaire 32 -'How often do any of these bad feelings happen ..never/once or twice/a day nearly every month/a day nearly every week/nearly every day/every day/
54 Pupil Questionnaire item 33 - 'How serious is the problem of these feelings for you ..very serious/ serious/not sure/hardly a problem at all/ no bad feelings'
55 Pupil Questionnaire item 34 - ' Ever stayed away by pretending to be sick ..never/once or twice/a day nearly every month/ a day nearly every week/ nearly every day/ every day'
56 Pupil Questionnaire item 35 - 'When did you last stay away from school wihout your parents knowing - never/more than a year ago/months ago/last month/last week/this week'
57 Pupil Questionnaire item 36 - 'when you stayed away without your parents knowing were you ..by yourself/ with anoher boy or girl/ with more than one other/have never stayed away'

APPENDIX 30 Contd.,

Pupil Questionnaire item 37 - ' Do you every feel frightened about any of the following'

58 Insects
59 Darkness
60 Enclosed Spaces
61 Animals
62 Going Out
63 Water
64 Heights
65 Open Spaces
66 Any other fears (please specify)
67 Pupil Questionnaire item 38 - 'How serious is the problem of these special fears for you.. very serious/serious/not sure/not serious/hardly a problem/I have no special fears/'
68 Pupil Questionnaire item 39 - 'Have you moved from another school during this term'
69 Pupil Questionnaire item 40 - 'Do you prefer this school to your old one .. I haven't moved/prefer this/ prefer old one/not sure/'
70 Pupil Questionnaire item 41 - 'Did you move from another class during this term
71 Pupil Questionnaire item 42 - 'Do you prefer this class or your old one..haven't moved/prefer this one/ prefer old one/not sure/'
72 Pupil Questionnaire item 43 - 'Do you get pocket money .. never/sometimes/ up to 50p per week/ up to £1 per week/ up to £2 per week/ more than £2 per week/'
73 Pupil Questionnaire item 44 - 'Do you have a part time job'
74 Pupil Questionnaire item 45 - 'Did you enjoy completing this questionnaire .. a little/a lot/ not sure/didn't enjoy it much/didn't enjoy it at all/'
75 Rutter Scale item 1 - 'Very restless'
76 Rutter Scale item 2 - 'Truants from school'
77 Rutter Scale item 3 - 'Squirmy, fidgety child'
78 Rutter Scale item 4 - 'Often destroys own or others belongings
79 Rutter Scale item 5 - 'Frequently fights with other children'
80 Rutter Scale item 6 - 'Not much liked by others'
81 Rutter Scale item 7 - 'Often worried.....'
82 Rutter Scale item 8 - 'Tends to be solitary'
83 Rutter Scale item 9 - 'Irritable.....'
84 Rutter Scale item 10 - 'Often appears miserable..'
85 Rutter Scale item 11 - 'Has twitches or tics...'
86 Rutter Scale item 12 - 'Sucks thumb or finger'
87 Rutter Scale item 13 - 'Frequently bites nails'
88 Rutter Scale item 14 - 'Absent for trivial reasons'
89 Rutter Scale item 15- 'Often disobedient'
90 Rutter Scale item 16 - 'Poor concentration ....'
91 Rutter Scale item 17 - 'Tends to be fearful ...'
92 Rutter Scale item 18 - 'Fussy over particular child'.

APPENDIX 30 contd.,

93 Rutter Scale item 19 - 'Often tells lies'
94 Rutter Scale item 20 - 'Has stolen things ....'
95 Rutter Scale item 21 - 'Has wet or soiled at school during this year'
96 Rutter Scale item 22 - 'Often complains of pains or aches'
97 Rutter Scale item 23 - 'Has had tears on arrival at school or has refused to come in ...'
98 Rutter Scale item 24 - 'Has stutter or stammer'
99 Rutter Scale item 25 - 'Has other speech difficulty'
100 Rutter Scale item 26 - 'Bullies other children'
101 How well does the teacher completing the scale know the child ...very well/moderately well/not very well.
102 Absent Mon am
103 Absent Mon pm
104 Absent Tue am
105 Absent Tue pm
106 Absent Wed am
107 Absent Wed pm
108 Absent Thur am
109 Absent Thur pm
110 Absent Fri am
111 Absent Fri pm

Sociometric data: Total number of times nominated each category. STRONG indicates nominated in one of first three places and WEAK indicates fourth or subsequent place.

112 Sit Beside - Strong
113 Sit Beside - Weak
114 Refuse to sit beside - Strong
115 Refuse to sit beside - Weak
116 Ask for help with work - Strong
117 Ask for help with work - Weak
118 Refuse to ask for help with work - Strong
119 Refuse to ask for help with work - Weak
120 Trust to tell a secret to - Strong
121 Trust to tell a secret to - Weak
122 Refuse to trust to tell a secret to - Strong
123 Refuse to trust to tell a secret to - Weak
124 Choose to holiday with - Strong
125 Choose to holiday with - Weak
126 Refuse to holiday with - Strong
127 Refuse to holiday with - Weak
128 Total positive choices made
129 Total negative choices made
130 Total number of friends claimed
131 Number of friends not in school
132 Parental Questionnaire item 1 - live in house/flat
133 Parental Questionnaire item 2 - renting/buying
134 Parental Questionnaire item 3 - rent from council/ landlord/ lodging with family/ house with job/ temporary accomodation.
135 Number of bedrooms
136 Marital Status
137 to 143 Names, ages and sex of children in the family

APPENDIX 30 contd.,

144 Subjects place in birth order
145 Fathers present occupation
146 Fathers age last birthday
147 Mothers present occupation
148 Mothers occupation before having child(ren) if different from above
149 Mothers age last birthday
150 Approximately how many times has the subject been to the GP in the past twelve months
151 Approximately how many times has mother been to the GP in the past 12 months
152 Approximately how many times has father been to the GP in the past 12 months
153 During the past 12 months has there been a serious illness/accident requiring three weeks or more medical treatment involving someone to whom the subject is very close
154 Has there been a death during the past 12 months involving someone to whom the subject is very close
155 Has either parent left home during the past twelve months
156 Have there been other changes in family circumstances druing the past 12 months
157 Does the subject generally like going to school

Occasionally children are reluctant to attend school and display one of more of the following physical signs

158 Not applicable
159 Stomach upset or stomach pains
160 Headache
161 Claiming to be dizzy
162 Going very pale
163 Complaining of feeling of going to be sick
164 Trembling
165 Hiding
166 Complaining of heart beating too fast
167 Firmly saying that he/she wont go
168 Running Away
169 Sweating
170 Fainting
171 A facial expression of fear or horror
172 Crying
173 Screaming
174 Struggling
175 Other (please specify)
176 Do these reactions normally disappear when pressure to attend is taken off
177 How do you usually try to deal with this situation
178 When did the subject last have difficulty going to school but none the less attended
179 When did it last prove completely impossible to get him/her to attend
180 How often have there been periods of complete refusal to attend school

APPENDIX 30 contd.,

181 How long have these bad patches lasted on average
182 Have any of his/her brothers or sisters ever refused to attend
183 When did this last happen
184 Approximately how far do you live from the school
185 How does the child usually travel to school
186 How satisfied are you with his/her general standard of education
187 If you had a choice would you send him/her to a different school
188 How satisfied are you with his/her general standard of behaviour
189 How does he/she spend most of his/her free time
190 How close is he/she to the house during free time
191 How easily do you feel he/she makes friends
192 How old on average are his/her friends
193 How many of his/her friends come from his/her school
194 Has he/she ever truanted to your knowledge
195 When did this last happen
196 Has he/she had any problems getting off to sleep during the past 3 months or so
197 Does he/she have bad dreams which wake him/her in the night
198 Has he/she wet the bed during the past 12 months

Has he/she any special fears or anxieties about which you know concerning any of the following:

199 Insects
200 Darkness
201 Enclosed spaces
202 Animals
203 Going out
204 Water
205 Heights
206 Open spaces
207 Any other fears (please specify)
208 Has any feature of you family life or of the childs development which you feel to be important not been covered by this questionnaire
209 Relationship to child of person completing this questionnaire

NB IN THE DISCRIMINANT FUNCTION ANALYSES UNDERTAKEN AS PART OF THE TEST OF HYPOTHESIS 1 VARIABLES 157 TO 181 WERE NOT INCLUDED AS THEY RELATE DIRECTLY TO SYMPTOMS/REACTIONS WHICH ONE OF THE GROUPS ARE KNOWN TO EXPERIENCE

(APPENDIX 31) . Chi Square analysis of type of fear by group membership.

BOYS

Fear		SP	AA	SP	DA	SP	Con	AA	Con	AA	DA	DA	Con
Insects		2 (7%)	2 (10%)	2 (7%)	0(0%)	2 (7%)	16(18%)	2 (10%)	16(18%)	2 (10%)	0 (0%)	0 (0%)	16(18%)
	χ^2	0		1.01		1.49		.4007		1.71		7.47	
	df	1		1		1		1		1		1	
	p	1.000		.3143		.2221		.5267		.1897		.0063 *	
Darkness		4(13%)	4(19%)	4(13%)	11(25%	4(13%)	5(6%)	4(19%)	5(6%)	4(19%	11(25%)	11(25%)	5(6%)
	χ^2	.025		.867		.9317		2.42		.047		8.54	
	df	1		1		1		1		1		1	
	p	.8720		.3518		.3344		.1191		.8275		.0035	
Enclosed spaces		6(20%)	2(10%)	6(20%)	10(23%)	6(20%)	16(18%)	2(10%)	16(18%)	2(10%	10(23%)	10(23%)	16(18%
	χ^2	.385		0.0		0.0		.4008		.8659		.1496	
	df	1		1		1		1		1		1	
	p	.5344		1.00		1.00		.5267		.3466		.6988	
Animals		2(7%)	0(0%)	2(7%)	0(0%)	2(7%)	4(5%)	0(0%)	4(5%)	0(0%)	0(0%)	0(0%)	4(5%
	χ^2	.224		1.01		0.0		.122		0.0		.605	
	df	1		1		1		1		1		1	
	p	.6353		.3143		1.000		.7266		-		.3697	

(APPENDIX 31) Chi Square analysis of type of fear by group membership. (contd.,)

BOYS

Fear		SP	AA	SP	DA	SP	Con	AA	Con	AA	DA	DA	Con
Going Out		5(17%)	1(5%)	5(17%)	0(0%)	5(17%)	0(0%)	1(5%)	0(0%)	1(5%)	0(0%)	0(0%)	0(0%)
	χ^2	.734		5.44		11.48		.612		.145		-	
	df	1		1		1		1		1		-	
	p	.3914		.0197*		.0007*		.4337		.703		-	
Water		4(13%)	1(5%)	4(13%)	3(7%)	4(13%)	8(9%)	1(5%)	8(9%)	1(5%)	3(7%)	3(7%)	8(9%)
	χ^2	.285		.287		.098		.042		0.0		.012	
	df	1		1		1		1		1		1	
	p	.5929		.5922		.7534		.8365		1.00		.9113	
Heights		9(30%)	8(38%)	9(30%)	12(27%)	9(30%)	25(28%)	8(38%)	25(28%)	8(38%)	12(27%)	12(27%)	25(28%)
	χ^2	.09		0.0		0.0		.364		.356		0.0	
	df	1		1		1		1		1		1	
	p	.7628		1.00		1.00		.546		.5507		1.00	
Other		3(10%)	2(10%)	3(10%)	7(16%)	3(10%)	7(8%)	2(10%)	7(8%)	2(10%)	7(16%)	7(16%)	7(8%)
	χ^2	0.0		.147		0.0		0.0		.098		1.2	
	df	1		1		1		1		1		1	
	p	1.00		.7012		1.00		1.00		.7542		.2716	

NB OPEN SPACES omitted as no child in any group reported a fear of this.

(APPENDIX 32) Chi Square analysis of type of fear by group membership - GIRLS

Fear		SP	AA	SP	DA	SP	Con	AA	Con	AA	DA	DA	Con
Insects		5(26%)	3(18%)	5(26%)	27(55%)	5(26%)	36(33%)	3(18%)	36(33%)	3(18%)	27(55%)	27(55%)	36(33%)
	χ^2	.39		4.55		.36		1.68		7.14		6.6	
	df	1		1		1		1		1		1	
	p	.532		.032*		.54		.194		.007*		.009*	
Darkness		9(47%)	8(47%)	9(47%)	12(25%)	9(47%)	36(33%)	8(47%)	36(33%)	8(47%)	12(25%)	12(25%)	36(33%)
	χ^2	.0003		3.35		1.39		1.2		3.04		1.24	
	df	1		1		1		1		1		1	
	p	.985		.066		.238		.270		.081		.265	
Enclosed spaces		5(26%)	2(12%)	5(26%)	12(25%)	5(26%)	15(14%)	2(12%)	15(14%)	2(12%)	12(25%)	12(25%)	15(14%)
	χ^2	1.2		.04		1.88		.056		1.2		2.66	
	df	1		1		1		1		1		1	
	p	.270		.876		.170		.812		.268		.102	
Animals		1(5%)	0(0%)	1(5%)	2(4%)	1(5%)	6(6%)	0(0%)	6(6%)	0(0%)	2(4%)	2(4%)	6(6%)
	χ^2	.92		.045		.002		.992		.715		.151	
	df	1		1		1		1		1		1	
	p	.337		.831		.958		.319		.397		.697	

*= significant at or beyond .05 level

(APPENDIX 32) Chi Square analysis of type of fear by group membership - GIRLS (contd.,)

Fear		SP	AA	SP	DA	SP	Con	AA	Con	AA	DA	DA	Con
Going Out		5(26%)	1(6%)	5(26%)	3(6%)	5(26%)	2(2%)	1(6%)	2(2%)	1(6%)	3(6%)	3(6%)	2(2%)
	χ^2	2.69		5.37		18.56		1.0		.001		1.99	
	df	1		1		1		1		1		1	
	p	.100		.02*		.000*		.312		.971		.157	
Water		1(5%)	3(18%)	1(5%)	2(4%)	1(5%)	4(4%)	3(18%)	4(4%)	3(18%)	2(4%)	2(4%)	4(4%)
	χ^2	1.39		.045		.103		5.4		3.3		.013	
	df	1		1		1		1		1		1	
	p	.237		.831		.747		.02*		.068		.908	
Heights		3(16%)	5(29%)	3(16%)	12(25%)	3(16%)	36(33%)	5(29%)	36(33%)	5(29%)	12(25%)	12(25%)	36(33%)
	χ^2	.963		.602		2.3		.102		.159		1.24	
	df	1		1		1		1		1		1	
	p	.326		.437		.126		.748		.689		.265	
Open Spaces		1(5%)	0(0%)	1(5%)	1(2%)	1(5%)	0(0%)	0(0%)	0(0%)	0(0%)	1(2%)	1(2%)	0(0%)
	χ^2	.920		.497		5.7		-		0.0		2.1	
	df	1		1		1		-		1		1	
	p	.337		.48		.016*		-		1.00		.142	

*= significant at or beyond .05 level